Te Puna Matauranga

...the well spring of knowledge...

Centre for Information Technology Research Internship Conference 2025, vol I

The Waikato Institute of Technology
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Foundations to Futures

The Level 5 Noho Marae IT Experience


Tukua te kāhu mātauranga
kia rere
let the embodiment of knowledge fly

Our Team

Te Kura Mo Te Hangarau Whakaaturanga
Centre for Information Technology

SAM CUNNANE

DIRECTOR

Centre for Information Technology, Centre for Business, School of Media Arts, Centre for Education and Foundation Pathways

At the Wintec Institute of Technology, our research strategy focuses on applied projects that address community and industry needs, delivering substantial real-world impact. We build strong relationships with local industries, communities, and iwi, while also engaging globally through our research network. Our staff collaborate both internally and externally to enhance research excellence and contribute at a national level.

The Centre for Information Technology emphasizes applied research and industry placements, providing students with vital hands-on experience. These opportunities include internships in diverse business settings and independent projects tackling real-world IT challenges. This research promotes in-depth study and innovation, making a significant contribution to the IT field. Guided by academic mentors, these initiatives ensure that students deliver meaningful solutions, effectively bridging academic knowledge and industry needs.

DR. BLAINE RAKENA

TEAM MANAGER

Centre for Information Technology

The Centre for Information Technology at Wintec New Zealand is committed to applied research that benefits Māori and Pacific communities, local communities, our industry partners, and the broader research community. Our efforts strengthen our connections within the CITRENZ network, linking us with IT educators across New Zealand. Our team remains dedicated to producing impactful research, contributing to significant achievements in the New Zealand Government's PBRF.

Beyond research, the Centre focuses on providing students with practical experience through industry placements and projects. Our internship programme offers practical IT roles within various businesses, while independent projects allow students to address real-world IT problems under academic supervision. These initiatives not only enhance student skills and employability but also support local businesses and non-profits by meeting their IT needs—reflecting our commitment to both community engagement and professional development.

HAMIORA
TE MOMO

CENTRE RESEARCH LEADER

Centre for Information Technology

Research within our Centre has pivoted in recent years due to shifting business and technology landscape, but we have remained vigilant and committed to engaging with the rapidly changing world of IT. While our research directions adapted to the shifting landscape, we remained vigilant and committed to engaging with the rapidly changing world of IT. This year, our Centre has concentrated on research areas such as AI generation, prompt engineering, large language models, machine learning applications, machine learning with cultural artefacts, mobile augmented reality, and Mātauranga Māori in IT pedagogy.

KEY TASKS

Enhance Research Visibility
Facilitate Research Events and Culture
Strategic Research Development and Management

The Research Leader's primary responsibility is to foster and cultivate research within the Centre, including enhancing research visibility and awareness through our various initiatives, most notably our Research Wall. This wall, Te Puna Mātauranga Māori – *the wellspring of knowledge*, serves as a dynamic showcase of ongoing research activities within our Centre, highlighting significant research events throughout the year. Furthermore, the role of the research leader is to ensure our Centre's research objectives produce a balanced portfolio of both theoretical and applied research, leading to significant scholarly artefacts and outputs.

BASUNDHARA
RAI

INDUSTRY RELATIONSHIPS MANAGER

Centre for Information Technology Bachelor Internship/IT Projects Manager

The Industry Relationships Manager (IRM) at the Centre for Information Technology (CFIT) at Wintec New Zealand, is dedicated to enhancing student experiences through Work Integrated Learning (WIL). Our WIL program provides valuable opportunities for students to gain real-world experience in IT roles, either through industry placements (internships) or industry IT projects. Internships provide students hands-on experience within businesses, while industry projects allow them to solve real IT problems independently, under academic supervision.

KEY TASKS

Maintain industry partnerships
Coordinate student placements and projects
Facilitate industry engagement and collaboration

The IRM actively engages with local businesses and organizations to secure internship opportunities for both undergraduate and postgraduate students, enhancing their employability and industry readiness. We also collaborate with universities and training organizations to share insights and foster partnerships. The IRM's strategic engagement has strengthened connections with industry partners, facilitating diverse professional environments for our students and contributing to the growth of Waikato's technology landscape. Our commitment to WIL ensures students develop practical skills, supporting their transition into the IT industry.

INDUSTRY RELATIONSHIPS MANAGER

DR. ANURADHA MADURAPPERUMAGE

Centre for Information Technology Postgraduate Internship/IT Projects Manager

The Industry Relations Manager (IRM) for postgraduate IT programmes at the Centre for Information Technology (CFIT), Wintec New Zealand, plays a pivotal role in supporting students undertaking substantial internships or industry projects. These experiences require students to apply advanced IT knowledge to complex real-world problems, enriching critical thinking, strategic planning, and reflective practice within a professional setting.

The postgraduate IRM works with both industry and academic teams to ensure students are placed in environments where they can identify and define significant IT problems, evaluate appropriate technology solutions, and develop robust implementation strategies. Ongoing engagement and feedback support students in apply reflective practice to bridge academic knowledge with professional expectations. These efforts enhance student capability, contribute to industry innovation, and reflect the Centre's commitment to high-impact applied outcomes.

KEY TASKS

Maintain partnerships with industry
Align strategic project scopes with academic compliance
Facilitate collaboration between postgraduates, industry, and staff

Research

Begin with a thought, to transcend an evolution...

Our Research Team

TALKING CARVINGS & MATAURANGA MĀORI IN IT

HAMIORA
TE MOMO
[RESEARCH LEADER]

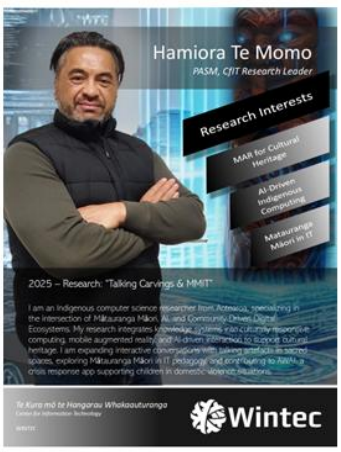
Research Focus

I am an Indigenous computer science researcher from Aotearoa, specialising in the integration of Mātauranga Māori cosmology and practices with mobile augmented reality (MAR), computer vision, geospatial awareness, and augmented reality (AR) annotations to create immersive cultural experiences. By using a combination of AI, ML, AR and MAR on cultural artefacts—specifically carvings on marae—I create a dynamic connection where it appears as though "carvings are talking to you". This approach not only enhances the mobile cultural experience but is also pivotal to preserving cultural heritage and cultural sustainability.

I am committed to advancing Mātauranga Māori IT pedagogy by exploring Māori capacity building initiatives for creating frameworks that integrate indigenous knowledge systems into tertiary IT education. I advocate for the integration of AI-generated tools in educational contexts, researching and exploring practical strategies for teaching, learning, and delivery in the IT sector.

RESEARCH INTERESTS

Mobile Augmented Reality Cultural Heritage Development
Machine Learning, AI Generated, Cultural Artefacts
Mātauranga Māori in IT



DR. DIAB ABUAIADAH

PROMPT ENGINEERING AND IT

Research Focus

My research focuses on innovative applications of prompt engineering, particularly within AI language models, to revolutionize white box testing. My research, conducted in collaboration with Dr Shantha Jayalal and Dr Michael Bosu, explores how prompt engineering can transform testing methodologies and tools. By automating test case generation, identifying critical code paths, and uncovering edge cases that traditional methods often overlook, our work aims to significantly enhance software quality.

RESEARCH INTERESTS

Deep Learning
AI in Software Testing
Prompt Engineering

Prompt engineering enables us to influence AI for deeper code analysis, improving bug detection and overall software reliability. Our approach not only streamlines testing process but also introduces a new paradigm in how software testing can be conducted with greater efficiency and accuracy. My primary research interests include deep learning, software testing, and prompt engineering. Through these areas, I strive to contribute to advancements in software engineering that ensure more robust and reliable applications, ultimately pushing the boundaries of current testing practices.

DR. MICHAEL BOSU

MACHINE LEARNING APPLICATIONS

Research Focus

I specialise in Software Effort Prediction (SEP), Machine Learning (ML), and DevOps performance analysis to enhance software project outcomes through data-driven strategies. My research focuses on integrating SEP and ML to improve resource estimation and planning accuracy using historical project data, while also addressing data quality challenges that impact predictive reliability. This work supports more effective and efficient software development practices.

RESEARCH INTERESTS

Machine Learning
Software Effort Prediction
Data Quality

In parallel, I investigate DevOps methodologies, particularly the lack of standardised performance evaluation mechanisms. By identifying key performance indicators—such as Deployment Frequency, Time to Market, Change Failure Rate, and Mean Time to Recovery—through literature review and industry interviews, I aim to strengthen DevOps project success and productivity.

I also collaborate with Dr Diab Abuaiadah and Dr Shantha Jayalal on research into software testing, prompt engineering, and the use of AI in healthcare. Collectively, these efforts contribute to building smarter, more resilient systems in both software engineering and applied AI domains.

SOFTWARE ENGINEERING MACHINE LEARNING

DR. SHANTHA JAYALAL

Research Focus

My academic pursuit explores the integration of Prompt Engineering and Large Language Models (LLMs) to advance AI-driven software testing, DevOps performance, and healthcare applications. With a strong foundation in machine learning, semantic web, and web engineering, my research investigates how LLMs can enhance white-box testing, increase automation, and improve response accuracy in clinical decision support systems (CDSS).

Collaborating with Dr Diab Abuaiadah and Dr Michael Bosu, I am developing novel techniques to optimise software quality and testing reliability through advanced prompt engineering strategies. Our current studies evaluate ChatGPT's consistency and accuracy using the 2025 ESC guidelines for hypertension and blood pressure, aiming to build greater clinical trust.

RESEARCH INTERESTS

AI in Health
AI in Software Testing
DevOps Applications

I also explore DevOps metrics—such as change failure rate and time to recovery—to assess and improve delivery efficiency. My work also advances semantic web interoperability, supporting intelligent system development that bridges software engineering, AI, and health technology innovation.

AI IN HEALTH AND DESIGN SCIENCE

DR. ANURADHA MADURAPPERUMAGE [NEW RESEARCHER]

Research Focus

My research focuses on the integration of advanced data analytics, machine learning (ML), artificial intelligence (AI), data mining, and design science to address complex, high-impact challenges, particularly in health informatics. I am especially interested in how predictive modelling, survival analysis, and algorithmic design can support real-world clinical decision-making and improve patient outcomes.

Currently, I am developing a Clinical Decision Support System (CDSS) to predict diabetes-related complications using patient data provided by Te Whatu Ora – Health New Zealand. This research applies enhanced design science methodologies alongside machine learning and survival analysis techniques to create a system that is technically robust, practically implementable, and responsive to the cultural and healthcare needs of New Zealand's diverse population.

My work contributes to the broader field of AI-driven healthcare by uncovering demographic patterns and health inequities within large-scale datasets. It aims to enhance CDSS frameworks by embedding data mining and ML techniques to support data-driven, equitable, informed decision-making across clinical environments.

RESEARCH INTERESTS

Machine Learning
Health Informatics
Artificial Intelligence

JOHAN ONGCHANGCO [NEW RESEARCHER]

DIGITAL TWINS OF ORGANISATION AND AI

Research Focus

My research advances information systems toward achieving the value promise of good governance. I focus on developing Digital Twins of Organizations (DTOs), creating virtual models that simulate and optimise processes. An ongoing investigation demonstrates how DTOs can enhance data-driven decision-making and operational efficiency. I also investigate AI-assisted process mining to uncover inefficiencies, improve workflows, and support compliance with organisational policies. This approach strengthens transparency and accountability by identifying performance gaps and guiding continuous improvement.

RESEARCH INTERESTS

Digital Twins of Organisations (DTOs)
AI Process Mining
IS Infrastructure

In addition, I design IT infrastructures aligned with governance frameworks such as COBIT, COSO, and ISO/IEC 27001. These standards promote the development of secure, resilient systems capable of adapting to change.

Together, my research supports the creation of intelligent and ethically governed information systems that meet the evolving needs of institutions and organisations, fostering more effective and sustainable decision-making practices.

Emerging Researchers

HOHEPA-ROPATA MANGU
[NEW RESEARCHER]

MĀTAURANGA MĀORI IN IT EDUCATION

Research Focus

My research explores how Mātauranga Māori can be meaningfully integrated into Information Technology (IT) education. I focus on Māori concepts such as whakawhanaungatanga (relationship-building) and tuakana-teina (peer mentoring) to understand how they support student engagement, wellbeing, and academic success.

A key aspect of my work involves examining the role of noho marae experiences, where students are immersed in culturally grounded learning environments. These settings promote collective learning, strengthen identity, and foster supportive peer relationships. Through this research, I aim to develop more inclusive teaching practices that reflect Māori worldviews and enhance outcomes for Māori learners in IT education.

RESEARCH INTERESTS

Kaupapa Māori Pedagogy
Mātauranga Māori in IT Education
Tauira Success Strategies

ALEX
YU

GAME DEVELOPMENT CREATIVITY

Research Focus

My research integrates game development with computational thinking to support writing and problem-solving skills in primary school students. I explore how game-based learning can serve as an effective educational tool, fostering creativity, critical thinking, and collaboration.

By engaging students in designing and interacting with games, I aim to create dynamic learning environments that encourage active participation and deeper cognitive engagement. This approach not only enhances core academic skills but also supports digital literacy and resilience in problem-solving. My goal is to empower young learners through playful, purposeful learning experiences that make complex concepts more accessible and meaningful.

RESEARCH INTERESTS

Machine Learning
Health Informatics
Artificial Intelligence


Ki Tua o Paerangi:
Emerging IT Event Horizons
Online Symposium, 14th April, 2025
T-O
TOI-OHOMAI
Wintec
Like the ebb and flow of knowledge, where light and shadow converge, research is a journey beyond the horizon, continuously revealing new possibilities. As IT expands into new realms, we navigate the interplay of light and shadow, weaving together computing, pedagogy, AI, cybersecurity, analytics, mātauranga Māori, ethics and beyond. This symposium marks a point of transformation-where ideas emerge, innovations take shape, and the digital future is redefined.

Our Journey into Tomorrow

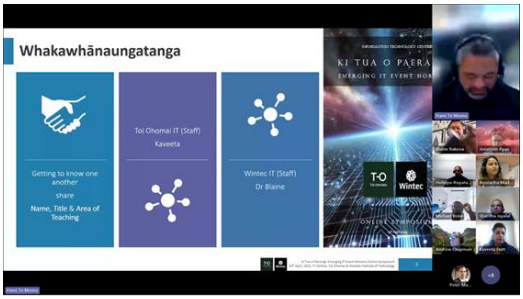
Ki Tua o Paerangi: Emerging IT Event Horizons

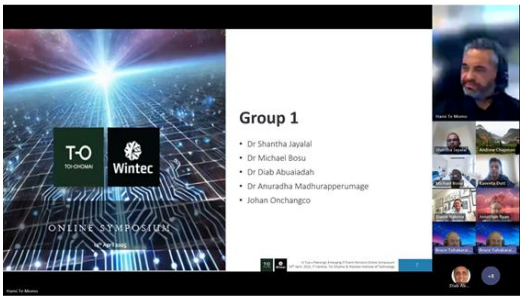
Our first collaborative online symposium marked a significant milestone in our shared commitment to IT-empowered research. In partnership with Toi Ohomai and the Wintec Information Technology sectors, this symposium served as a platform to explore, question, and reshape how we approach AI, IT Tertiary Training, Māori IT Pedagogy, and Digital Technology futures that lay ahead.

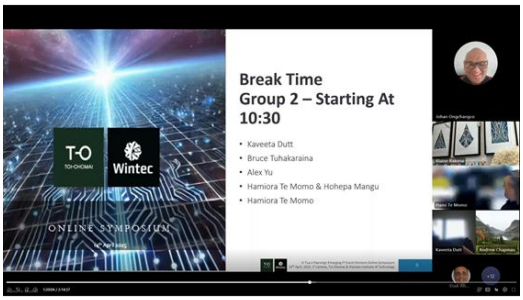
Like the ebb and flow of knowledge, where light and shadow converge, research is a journey beyond the horizon—constantly revealing new forms of understanding and possibilities. Our symposium theme, *Ki Tua o Paerangi*, draws from this imagery, inviting researchers to navigate the emerging intersections of computing, AI, decision support systems, analytics, mātauranga Māori, and ethics.

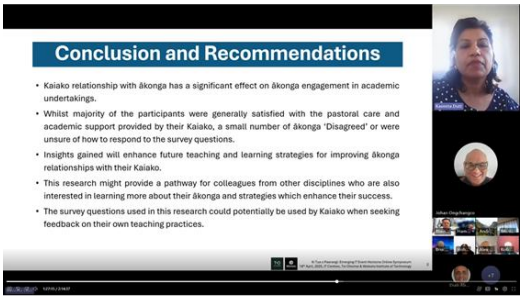
More than just a presentation forum, the event was a collaborative space where relationships were formed, ideas were nurtured, and the digital horizon was redefined through shared insight. The table that follows outlines the order of proceedings and the diverse topics explored.

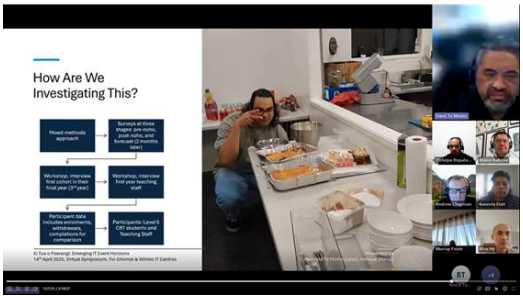
Order of Proceedings	Title
Dr. Shantha Jayalal (Wintec)	Clinical Decision Support Systems with GPT Models
Dr. Michael Bosu (Wintec)	An Investigation into DevOps Performance Indicators
Dr. Diab Abuaiadah (Wintec)	Using AI for Software Testing
Dr. Anuradha Madurapperumage (Wintec)	Decision Support System for Predicting Diabetes Mellitus Complications
Johan Onchangco (Wintec)	Towards Digital Twin of an Organisation (DTO): A Road Map for Wintec
Kaveeta Dutt (Toi Ohomai)	Ākonga perceptions of the value of their relationships with Kaiako
Bruce Tuhakaraina (Toi Ohomai)	Enhancing IT Education through Secondary Tertiary Partnerships
Alex Yu (Wintec)	Game-Based Writing Development
Hamiora Te Momo & Hohepa Mangu (Wintec)	Investigating the Impact of Noho Marae on Ākonga-Centred Learning Communities in IT
Hamiora Te Momo (Wintec)	Awhi Whanau, Awhi Iwi (AWAI): Helping Whanau and Tamariki in Crisis (with Massey Uni)
	Anthropomorphising Whakairo: Creating Living Realities through Augmenting Carvings











Internships

IT Projects

Our Interns & IT Projects

Our Semester One and Two, Internship IT Projects Work Integrated Learning initiative is made possible through the support of our external stakeholders. The collection of reputable industry partners enables our students to apply their skills in real-world situations. The following table is the list of stakeholders who contributed their valuable time and efforts towards our internship and IT project students.

Stakeholder	Stakeholder
• Hamilton City Council (HCC)	• Te Wānanga o Aotearoa
• CfIT (Wintec)	• Thrill Capital
• Knowledgeware Limited	• NIWA
• iSim Limited	• GDC Digital Solutions
• Sports Science (Wintec)	• Waikato Regional Council (WRC)
• GDC Consultants Limited	• Straker Limited
• MEARTANZ Project	• ITS (Wintec)
• Fusion Networks	• Pearl Innovation
• Bridged IT Services	• REGEN Computers
• Fonterra	• Sports Club
• AppleFix & Tech Engineers	• Gallagher

GDC CONSULTANTS LIMITED: Semester One

ARUNA LAKSHMANA DOSS

Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship at GDC Consultants Ltd., I served as a Business Analyst on the Workforce Management System (WFM) Development Project. My role involved gathering and analysing business requirements, creating documentation such as SRS and supporting Agile practices through sprint planning and backlog management in JIRA. I collaborated with stakeholders and developers to ensure project alignment and functional clarity.

KEY TASKS

Requirement Elicitation
Document SRS, User Stories and Use Cases
Agile Support, Mapping, Workflow, UAT Documentation

LinkedIn: https://www.linkedin.com/in/aruna-lakshmana-doss-b2673a38/

I also designed process flows, defined user stories with acceptance criteria, and created the user acceptance testing document. Security features like role-based access and Multi-Factor Authentication were documented. This internship helped me apply Business Analysis skills, strengthen my Agile understanding, and contribute to a scalable, secure workforce management solution.

DEVINA
PAI

HAMILTON CITY COUNCIL: Semester One

Digital Services
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: At Hamilton City Council, I was tasked with addressing a growing backlog in IT service tickets and improving digital storage during a major system migration. I conducted ITSM analytics using advanced Excel techniques to uncover trends in ticket volume, response time, and user behaviour. Insights were presented through data visualisations to support decision-making.

Collaborating with senior managers, I cleared a significant backlog and created a knowledge base for recurring issues. Simultaneously, I recovered over 2TB of storage by decluttering SharePoint, reviewing high-versioned files, and safely disposing of outdated content. I earned certification in Nintex Process Manager, enhancing my process documentation skills. This internship demonstrated data-driven problem solving, service delivery, and digital optimisation within a government organisation.

KEY TASKS

ITSM Trend Analysis, Backlog and Management Efficiency
SharePoint Optimisation & Recovery, Policy-Compliance
Developed Knowledge Base, Improved IT Efficiency

LinkedIn: https://www.linkedin.com/in/devinapai

HIMANSHU
BHADRI

GDC CONSULTANTS LIMITED: Semester One

Front-End Software Developer
Internship: Postgrad Diploma in Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship as a Front-End Developer at GDC, I worked on a Workforce Management System, focusing on building responsive and user-friendly interfaces using React and Bootstrap. My role involved designing and developing dynamic UI components, ensuring cross-browser compatibility, and integrating frontend elements with backend services through RESTful APIs.

KEY TASKS

Developed Responsive UI components using React and Bootstrap
Integrated Frontend with Backend using RESTful APIs
Collaborated with design and backend for seamless workflow

LinkedIn: https://www.linkedin.com/in/himanshu-bhadri-718719256/

I collaborated closely with backend developers and UI/UX designers to align with project requirements and ensure seamless data flow. This experience allowed me to strengthen my skills in component-based architecture, API integration, and modern front-end development practices. Additionally, I gained practical exposure to agile methodologies and professional development workflows, enhancing both my technical capabilities and collaborative experience in a real-world software development environment.

GDC CONSULTANTS LIMITED: Semester One

SHIHAN SABIR

UX Designer
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship as a UX Designer at GDC Consultants, I was responsible for designing a scalable Workforce Management System to improve internal project, task, and employee management. My role involved conducting user analysis, competitor analysis, wireframing, prototyping, and delivering a design handover for development. I worked closely with stakeholders and the product team to ensure the solution aligned with business needs and user expectations. Tools used included Figma for UX/UI design and Jira for efficiently managing tasks in an agile work environment. I applied industry-standard UX methodologies such as progressive disclosure and design critique to ensure the final product was both functional and intuitive. This experience strengthened my skills in design thinking, problem-solving, and professional communication while also helping deliver a product that added genuine value to the business.

KEY TASKS

User Analysis and Competitor Analysis
UX/UI Design for Workforce Management System
Design Handover & Developer Support

LinkedIn: https://www.linkedin.com/in/shihansabir/

GDC CONSULTANTS LIMITED: Semester One

ANUTHTHARA GAMAGE

Software Engineer
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship at GDC Consultants, I worked as a backend developer on a Workforce Management System (WMS) designed to streamline employee tracking, project assignments, and budgeting processes. My primary responsibilities included developing and deploying RESTful APIs using Node.js and Express.js, implementing secure user authentication with JWT, and designing efficient MySQL database schemas. I performed extensive testing using Thunder Client and Postman to ensure the reliability and performance of each endpoint.

KEY TASKS

Developed and deployed RESTful API's (Node.js, Express.js)
Deployed MYSQL schemas for Efficiency, Security, and Scalability
API Testing for Integration with Postman & Thunder Client

LinkedIn: https://www.linkedin.com/in/anuththara-kavindi/

I collaborated closely with the frontend team to enable smooth integration across the system. The internship allowed me to apply theoretical knowledge in a real-world context, strengthen my technical skills, and deliver a secure and scalable backend solution that met the organization's requirements and added long-term operational value.

PUJA
BHANDARKAR

HAMILTON CITY COUNCIL: Semester One

Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship with the Digital Services team at Hamilton City Council, I completed over 270 hours contributing to critical IT operations. My primary responsibilities included documenting the restructuring of SharePoint sites to enhance accessibility and usability, efficiently managing IT Service Management (ITSM) incidents and service requests to support daily operations and developing a comprehensive knowledge base to improve information sharing and user support.

This experience provided me with valuable insights into public sector IT systems and strengthened my skills in technical documentation, IT support processes, and digital knowledge management within a collaborative, real-world professional environment.

KEY TASKS

Documenting and Restructuring SharePoint
Managing ITSM Tickers and Providing Solutions
Building FAQ Knowledge Base for ETA Ticket Optimisation

LinkedIn: https://www.linkedin.com/in/puja-bhandarkar-rao-533b63b1/

JESSIE
MOSEN

KNOWLEDGEWARE LIMITED: Semester One

Software Engineer
Internship: Bachelor of Applied Information Technology
Supervisor: Hamiora Te Momo

Abstract: During my internship at Knowledgeware Limited, I contributed to developing and enhancing Kerkee—an AI-driven, secure team chat application. My objectives were to build skills in C#, ASP.NET, and MVVM architecture while learning to apply best practices in security and deployment. I tackled challenges such as refactoring hardcoded connection strings into Azure Vault, implementing tokenization, and configuring Role-Based Access Control (RBAC) to protect sensitive data. I improved user experience by adding features like auto-save, multi-line chat input, and AI model selection. Throughout the internship, I documented my work thoroughly to support future developers. Key learnings included mastering Blazor view binding, advanced debugging, dependency injection, and understanding server configurations. I also honed my confidence in tackling complex technical issues and collaborating with team members. This internship solidified my understanding of secure, scalable web development, leaving me better prepared for real-world software challenges while adding tangible value to the Kerkee project and team.

KEY TASKS

Azure Vault Security, Tokenization, Role-Based Access Control,
Enhanced UX with AI Model Selection Multiline Chat
C#, ASP.NET, MVVM, Blazor Integration & Documentation

LinkedIn: https://www.linkedin.com/in/jessie-mosen-48411330b/

SPORTS SCIENCE (WINTEC): Semester One

FRANCESCA DE LUNA

Lead Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: During my internship, I served as the Lead Business Analyst at the Wintec Rotokauri Sports Science Centre for a Data Visualization Project. The project focused on developing an interactive dashboard to help the coach and athletes to gain a better understanding on the performance data and support an evidence-based decision-making analysis. I focused on improving the communications and collaborations among all stakeholders.

Throughout this project, I used tools such as JIRA, Microsoft Teams, WhatsApp, Outlook and Power BI to support the project management and data analysis. This experience deepened my understanding of how Business Analysis practices can add value to the project coordination and help translate business needs into practical data solutions.

KEY TASKS

Business and Stakeholder Requirements Gathering & Scoping
Workflow Analysis for Process Improvement and Efficiency
Project Alignment with Technical and Business Strategies

LinkedIn: https://www.linkedin.com/in/fdeluna/

NIWA: Semester One

RAINE ROBERTS

Network & Systems Engineer
Internship: Bachelor of Applied Information Technology
Supervisor: Stewart Hardie

Abstract: During my internship with the National Weather Institute of Atmospheric Research (NIWA), I focused on improving network security, resilience, and connectivity within advanced technological environments. I implemented Zero Trust Network Access (ZTNA) to enhance cybersecurity by enforcing strict identity verification and reducing implicit trust across the network, replacing outdated on-premises VPN infrastructure. I also configured a long-range network for Tolypella, an autonomous boat project, enabling reliable communication and control systems essential for autonomous navigation.

In addition, I developed and tested a disaster recovery strategy to ensure network availability during outages, minimising downtime and preserving data integrity. My time at NIWA provided valuable experience in implementing, testing, and deploying enterprise-level IT systems, and strengthened my understanding of secure network architecture, real-time system communication, and business continuity planning in mission-critical environments.

KEY TASKS

Zero Trust Network Access
Autonomous Boat Communication Network
Network Outage Disaster Recovery

LinkedIn: https://www.linkedin.com/in/raineroberts/

DARRWIN DELAPERLE

TE WĀNANGA O AOTEAROA: Semester One

Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Hohepa-Ropata Mangu

Abstract: During my internship as a Business Analyst, I was responsible for identifying inefficiencies within internal operational workflows and proposing actionable improvements through structured analysis. I engaged with stakeholders to gather business requirements, mapped current-state processes, and performed gap analyses to highlight areas for enhancement. By applying critical thinking and analytical frameworks, I translated stakeholder needs into clear documentation and strategic recommendations. I also supported the development of future-state process models and participated in validation sessions to ensure alignment with business objectives. This experience deepened my understanding of business analysis methodologies and strengthened my ability to deliver insights that drive informed, data-backed decision-making in dynamic organizational environments.

KEY TASKS

Requirements Gathering
Analysis
Automation

LinkedIn: https://www.linkedin.com/in/darrwindelaperle-78b2121ab/

PRATHAM PATEL

KNOWLEDGEWARE LIMITED: Semester One

Data Analyst
Internship: Master of Applied Information Technology
Supervisor: Hohepa-Ropata Mangu

Abstract: During my internship at Knowledgeware Limited, I played an active role in developing a financial data visualisation solution for a confidential client in the fund management sector. The project, centred on the creation of Financial Fund Performance Dashboards, was designed to convert complex transactional data into clear, interactive insights using Power BI. With Azure Data Lake providing secure and scalable data storage, a structured ETL process was implemented to support accurate, real-time reporting. Although initial integration with Azure presented challenges, alternative workflows using DBeaver ensured data integrity and continuity.

The project followed both Agile and SDLC methodologies, allowing for iterative development while maintaining structure. Ultimately, it strengthened financial oversight, improved reporting accuracy, and established a scalable model for future analytics solutions.

KEY TASKS

Developed Power BI Dashboards using ERPNext and Flat Files
Designed ETL Pipeline with Power Query, Azure Data Lake
Mitigated Power BI Integration Issues

LinkedIn:
https:// www.linkedin.com/in/patelpratham/

WAIKATO REGIONAL COUNCIL: Semester One

STEWART DEANE AUSTIN

Software Engineer
Internship: Bachelor of Applied Information Technology
Supervisor: Joshua Aguilar

Abstract: During my internship with Waikato Regional Council (WRC), I was tasked with developing a module replacement for the Fulcrum field data collection system using Survey123. I began by reviewing documentation from a previous Proof of Concept and understanding how modules were migrated to the ESRI platform. I learned to build smart surveys using XLSForm, incorporating complex logic, and validation constraints. I structured the Hydro module application to match existing workflows, with an emphasis on usability and alignment with WRC standards. I tested form performance, refined layouts, and ensured accurate data collection. I documented each stage, producing a technical handover guide, a user-focused training document, and a migration solution report. My work helped progress WRC's environmental monitoring modernisation and ensured the tools I created could be maintained and expanded by future staff or developers.

KEY TASKS

Migrating Fulcrum Environmental Data to ESRI Platform
Created XLSForm-Based Survey123 Forms with Validation Logic
Reported Findings and Contributed to WRC Knowledge Base

LinkedIn: https://www.linkedin.com/in/stewart-austin-nz/

TE WĀNANGA O AOTEAROA: Semester One

NEETHU KOCHAYYATHU SIVENDRAN

Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Hohepa-Ropata Mangu

Abstract: During my Business Analyst internship at Te Wānanga o Aotearoa (TWoA), I collaborated closely with the programme development team on key initiatives supporting digital transformation and educational innovation. My work involved in-depth research on AI-powered documentation tools, online learning platforms, and project management systems to inform strategic improvements. I contributed to the design of a new AI and computing course, aligning it with current industry trends and learner needs. Additionally, I developed a visual blueprint of the program development life cycle using Excel and Miro to support clearer planning and communication. Through this experience, I became familiar with tools such as PowerApps, SharePoint, Miro and WordPress, further expanding my technical proficiency. This internship strengthened my capabilities in business analysis, research, stakeholder collaboration, and digital solution design—equipping me with practical skills valuable for industry partnerships and future roles in technology-driven environments

KEY TASKS

Information Gathering and Analysis for Programme Development
Collaborated on Digital Automation Initiatives
Created Programme Development Blueprint

LinkedIn: https://www.linkedin.com/in/neethu-kochayyathu-sivendran-09593031b/

MASIHULLAH AZIZI

CFIT (WINTEC): Semester One

Software Engineer
Internship: Bachelor of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: During my internship as a Software Engineer, I contributed to the development of an Industry Internship System designed to manage student applications and industry placements. My main responsibilities included implementing a multi-step internship application form using Vue 3 and Element Plus, with full validation and dynamic field handling. I also worked on the backend using Egg.js and MySQL to build secure APIs for user authentication, email verification, and password recovery. Throughout the project, I collaborated with my team, followed version control best practices using Git and GitHub, and used Postman to test various backend scenarios. This project enhanced my understanding of full-stack development and helped me apply my technical skills to solve real-world problems in an industry-focused environment.

KEY TASKS

Developed Multi-Step 3 Form with Validation
Implemented Egg.js Authorization API with OTP Validation
Aligned Frontend-Backend Logic and Tested APIs in Postman

LinkedIn: https://www.linkedin.com/in/masihullah-azizi/

NATASHA CLAIRE PINKERTON

CFIT (WINTEC): Semester One

Game Developer
Internship: Bachelor of Applied Information Technology
Supervisor: Johan Onchangco

Abstract: For my project, I developed an online 2D platformer game where the player leaps between platforms inside a volcanic environment to reach an escape portal. Along the way, players can collect coins, and their progress is tracked through a functional login, save, and load system. The game was designed to be deployed online using Unity WebGL, ensuring accessibility from any browser. I implemented features such as a level reset button and a main menu button to improve the user experience.

Although additional features like hazards are planned for future updates, the current version provides a complete gameplay loop. This project helped me strengthen my skills in Unity development, user interface design, and implementing data persistence using PlayerPrefs.

KEY TASKS

Created Game Login Functions
Created functional Save and Load Features
Deployed Online Game Access using Unity WebGL

SPORTS SCIENCE (WINTEC): Semester One

GAGANDEEP KAUR

Data Analyst
Internship: Bachelor of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: I worked as a Data Analyst intern on a polo sports project, where I focused on analysing athlete performance data to support training and strategic decision-making. Collaborating closely with coaches and team members, I ensured that the insights I provided were aligned with their requirements and practical needs. I utilised Excel, Power BI, and Python for data cleaning, analysis, and visualisation, while GitHub Actions and Kaggle Notebooks supported automation and workflow management. The outcome was the development of clear, interactive dashboards that showcased key performance metrics such as speed, distance, and acceleration, enabling coaches to make informed, data-driven decisions on player training and performance strategies. This experience not only enhanced my technical skills in data handling and automation but also strengthened my communication and problem-solving abilities.

KEY TASKS

Data Transformation and Analysis
Created Interactive Dashboards using PowerBI
Workflow Automation, Automated Data Driven Tasks

LinkedIn: https://www.linkedin.com/in/gagandeep-kaur83/

ISIM LIMITED: Semester One

MOLLY HOTTMAN

Software Engineer & Technical Artist
Internship: Bachelor of Applied Information Technology
Supervisor: Alex Yu

Abstract: During my internship with iSim, I investigated and documented common issues that arose when exporting 3D assets from Blender to Unreal Engine 5 (UE5). These included objects importing incorrectly, missing textures, and irregular skeleton mesh wireframes. To support the team, I created a series of visual guides designed to prevent these problems occurring in future projects. I also conducted a SWOT analysis comparing animation workflows between Blender and UE5, and developed a working example using Control Rig in UE5 to animate a drone's propellers. My documentation is now part of iSim's internal knowledge base and serves as a reference for future work.

This internship helped me to develop a structured approach to problem-solving and gave me the confidence to communicate and explain new design processes.

KEY TASKS

Diagnosed and Documented Blender to Unreal Engine 5 Export Issues
Developed SWOT Analysis Comparative Animation Workflows
Built a Drone Propeller Control Rig in Unreal Engine 5

LinkedIn:
https://www.linkedin.com/in/mollyhottman/

KIM
JUNG

KNOWLEDGEWARE LIMITED: Semester One

Data Engineer & UI/UX Design
Internship: Bachelor of Applied Information Technology
Supervisor: Hohepa-Ropata Mangu

Abstract: During my internship at Knowledgeware Limited, I contributed to two key areas: automating financial transaction handling and redesigning UI/UX for client-facing applications. I developed a C#-based data integration tool to convert and upload journal entries into ERPNext via REST API, enabling a more efficient and accurate bookkeeping process. On the UI/UX side, I created responsive design systems using Figma, aligning with MudBlazor components to support both desktop and mobile platforms. Through Agile workflows, I participated in standup meetings, feedback cycles, and handover process, gaining hands-on experience with Software Development Life Cycle phases.

This internship strengthened my technical skills and taught me the importance of communication in cross-functional teams. I gained confidence in applying academic knowledge to solve real business problems.

KEY TASKS

Automated Financial Data Integration
UI/UX Design for Web and Mobile Apps
Documentation and Team Collaboration

Internship and IT Projects in Listing for Semester One

In addition to the featured profiles, we acknowledge the many talented students who, while choosing to remain private, have made invaluable contributions to the Internship IT Projects initiative. Their dedication behind the scenes have been essential to our collective success. We commend all our interns for their commitment to advancing the Centre's mission through their technical expertise. The table below lists students who have completed their internships and IT projects.

Stakeholder	Student
Waikato Regional Council	Logan Webster
iSim Limited	Hamish Getty
CfIT (Wintec)	Thomas Michael Karam
Knowledgeware Limited	Callum Mackenzie
Knowledgeware Limited	Jed Japp Thomson
Sports Science (Wintec)	Conrad Peterson
Thrill Capital Game Dev	Kadin Reece Torr

CFIT (WINTEC): Semester Two

HARIN RAMJI

Full Stack Web Developer
Internship: Bachelor of Applied Information Technology
Supervisor: Johan Ongchangco

Abstract: This project involved developing a user-friendly, browser-based Industry Relationship Management (IRM) platform designed to streamline the coordination of internships and student placements at WINTEC. The system features role-specific Graphical User Interfaces (GUI) for Students, Interns, Staff, and Administrators, each tailored to provide relevant functionality such as CV and profile submissions, internship management, and CMS (Content Management System) control.

KEY TASKS

Website Hosting with Content Management System
Workflow Investigation and Process Optimisation
Website UI/UX Design and Enhancement

LinkedIn: https://www.linkedin.com/in/harin-ramji/

Built with modern web technologies—Vue.js for the frontend, Egg.js for the backend, and MySQL for database management—the platform simplifies the entire internship process from application to completion. Key features include transparent viewing of student applications and client access to CVs. Overall, the system enhances efficiency by centralising internship data, automating workflows, and providing real-time insights into placement progress for all participants.

GDC CONSULTANTS LIMITED: Semester Two

MINOSHI PERERA

Quality Assurance Engineer
Internship: Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal

Abstract: During my internship at GDC Consultants Ltd, I contributed to the quality assurance of a Workforce Management System (WFM) designed to improve project creation, budgeting, task assignment, and timesheet tracking. My responsibilities included conducting manual testing, such as functional, positive, negative, and UI testing, to ensure the system met business and user requirements.

I gained hands-on experience in automation testing using Cypress and JavaScript, developing and executing automated test scripts based on the Page Object Model (POM) to improve test efficiency and maintainability. I was responsible for bug reporting using Jira and managing documentation in Confluence, including test plans, summary reports, and tool evaluations. This internship enhanced my technical and analytical skills and deepened my understanding of Agile testing practices.

KEY TASKS

Functional, Positive, Negative Testing, and UI Testing
Automation with Cypress & Java Script
Bug Reporting, Test Planning, and Test Documentation

LinkedIn:
https://www.linkedin.com/in/minoshiperera/

PRINCE
DESAI

GDC DIGITAL SOLUTIONS: Semester Two

Full Stack Web Developer
Internship: Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal

Abstract: As part of my internship programme for the Master of Applied Information Technology at Wintec, I developed a Workforce Management (WFM) System for GDC Consultants, an engineering and architectural company in New Zealand. The web application improves how staff record timesheets, manage projects, and track budgets through an intuitive and secure interface.

I built the front end using React and Redux-Saga, and the back end with Node.js and Express, integrating services like Xero for payroll and Dropbox for document management. This project helped me apply my technical knowledge to a real-world business problem, strengthen my skills in full-stack development and API integration, and gain practical experience in creating scalable software solutions for industry use.

KEY TASKS

Response UI with Open-Source Libraries
Integrating Web APIs with Redux and Redux-Saga
Optimised System Performance and Response Times

LinkedIn: https://www.linkedin.com/in/prince-desai-11b1b8251/

MERLIN
JOSE

CFIT (WINTEC): Semester Two

IT Project Management Lead & Quality Assurance
Internship: Master of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: During my internship with CfIT at Wintec, I served as a Project Manager and Tester for the Industry Relationship Manager (IRM) and Rasai App projects. I coordinated sprint planning and communication with the team and supervisor to ensure deliverables met quality and timeline expectations. I organised stand-up team meetings and in-person meetings once a week and to enhance collaboration and progress tracking. Using Jira, I tracked project progress, maintained documentation, prepared SLA, and supported effective team workflows.

As a Tester, I designed and executed functional, system, and user acceptance tests, performed API testing with Postman, and logged issues via Jira. I also created storyboard, supported demo preparation, and verified deployments to ensure a smooth handover and reliable system performance.

KEY TASKS

Plan, Manage, and Organise Sprints with Weekly Standups
Manage, Track, and Report Issues in Jira
Design, Managed, and Actioned Test Cases

LinkedIn: https://www.linkedin.com/in/merlin-jose-65aa07358/

GDC CONSULTANTS LIMITED: Semester Two

NILUSHA MIHIRANI MUNASINGHA

Backend Developer
Internship: Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal

Abstract: During my internship with GDC Consultants Limited, I worked as a Backend Developer on the Workforce Management System project. I designed and developed RESTful APIs for role-based authentication, timesheet, task, invoice, and reporting modules, while optimising the database structure. I used Node.js, Express.js, MySQL, Visual Studio, Postman, and GitHub for development, testing, and API management.

KEY TASKS

Backend API Design and Development
Systems Design and Architecture
Systems Maintenance, Testing, Performance, and Improvements

LinkedIn: https://www.linkedin.com/in/nilusha-munasingha-03312426/

I created high-level architectural and sequence diagrams to maintain best development practices and implemented stored procedures and Cron schedulers for automated reporting and real-time notifications. I also refined API signatures to improve maintainability and carried out comprehensive testing to ensure quality, scalability, and readiness for staging and UAT environments.

GDC CONSULTANTS LIMITED: Semester Two

CLYSON VARGHESE

Quality Assurance Engineer
Internship: Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal

Abstract: As part of my internship with GDC Consultants, I led QA Automation and Test Architecture for a custom Workforce Management System, intending to deliver a fully functional UAT-ready solution. I designed and implemented integration and system-level testing strategies using manual testing and Cypress for frontend and backend automation. I created test strategy documents, API automation scripts, and detailed test case specifications. I managed test planning in AgileTest and defect tracking in Jira.

Throughout the project, I identified and documented over 30 bugs, including 7 critical issues that impacted system performance and core functionality—such as login failures, data sync errors, and workflow breakdowns—which were resolved through regression cycles. This internship strengthened my skills in automation, architecture, and collaborative development in a real-world enterprise setting.

KEY TASKS

API Automation Script Implementation
Automative and Manual Testing
Strategic Test Documentation and Testcase Specifications

LinkedIn: https://www.linkedin.com/in/clysonvarghese/

GAUTAM
SHRESTHA

STRAKER LIMITED: Semester Two

AI-Assisted Full Stack Web Developer
Internship: Postgraduate Dip. of Applied Information Technology
Supervisor: Dr. Michael Bosu

Abstract: The redevelopment of Straker Ltd.'s legacy web application was carried out using Replit, an AI-powered cloud development platform, to enhance maintainability, scalability, and user experience. This project demonstrated the efficiency of AI-assisted software development, significantly reducing build and debugging times through Replit's real-time code suggestions and automation features.

KEY TASKS

AI-Powered Cloud Platform (Replit) for Website Redevelopment
Improvements in Scalability and User Experience
Demonstrate AI-Assisted Software Development Efficiency

LinkedIn: https://nz.linkedin.com/in/gautam3491

The modernised application includes a reactive frontend, robust backend logic, and integrated database connectivity. Development followed a structured approach using the MoSCoW methodology to prioritise core features. The final solution is maintainable, high quality, and cost-effective, addressing the technical debt of the legacy system. This project validates the use of AI-augmented tools in professional practice, aligning the client's technology infrastructure with contemporary software engineering standards.

DIVYA
JYOTI

MEARTANZ PROJECT: Semester Two

Business Intelligence & Compliance Analyst
Internship: Postgraduate Dip. of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: During my internship with the MEARTANZ Project under Andrew Buchanan-Smart, I served as a Business Analyst, Business Intelligence Analyst, and Security Compliance Advisor. I contributed to developing an implementation plan for a searchable Music Repository by leading requirements gathering, defining scope, and documenting user stories with acceptance criteria using MoSCoW prioritization. I modelled processes through BPMN and use case diagrams, created a project delivery plan with milestones, dependencies, and a Gantt chart, and facilitated UAT planning.

As a BI Analyst, I analysed client datasets and proposed KPI dashboards. In the security domain, I integrated CIS-lite controls for access, encryption, and audit compliance. This experience strengthened my analytical, documentation, and project coordination skills using Trello, Miro, Power BI, and CIS-Lite frameworks.

KEY TASKS

Requirements Gathering, Scope Definition, User Story Analysis
Project Management, Workflows, BI Dashboards
CIS Compliance with RBAC, Encryption, and Audit Logs

LinkedIn: https://www.linkedin.com/in/divya-jyoti-6339b6117/

APPLEFIX & TECH ENGINEERS: Semester Two

ALTAF HUSSAIN

Data Recovery Analyst
Internship: Postgraduate Dip. of Applied Information Technology
Supervisor: Prateek Gupta

Abstract: During my internship with AppleFix & Tech Engineers, I investigated the leading causes of data loss and disk failure, focusing on modern SSDs and file systems such as APFS and NTFS. I assessed various leading data recovery programs available on the market and conducted a practical comparative study of their tools. I created controlled data-loss scenario cases and measured how successfully each program restored lost data to evaluate performance and effectiveness.

My findings provided clear, evidence-based recommendations on the most suitable recovery software for specific failure types, helping make the data recovery process quicker, more reliable, and confidence-driven.

KEY TASKS

Investigate Data Loss and Disk Failure Causes
Critical evaluation of Data Recovery Methods and Tools
Analysed Results and Summarised Key Findings

LinkedIn: www.linkedin.com/in/altaf-hussain-b24233150

TE WĀNANGA O AOTEAROA: Semester Two

KAMALI RATNAYAKE ARACHCHILLAGE

IT & Business Analyst
Internship: Master of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: As an IT and Business Analysis Intern at Te Wānanga o Aotearoa (TWOA), I worked on two projects: Te Arawai and Tokokauneke. My responsibilities included system documentation, workflow mapping, survey creation, certificate template configuration, and IT setup to enhance project processes and user experiences. I gained hands-on experience with Arlo, SurveyMonkey, Miro, SharePoint, and Jira, including updating SharePoint sites and mapping processes in Miro.

I also developed user guides, verified system integrations, and ensured data accuracy and compliance with organisational policies. Collaborating with team members and participating in karakia improved my communication, cultural awareness, and analytical skills. Overall, this internship strengthened my technical, documentation, and project management abilities in a culturally grounded learning environment.

KEY TASKS

Mapped Workflows and Integrated Arlo with Survey Monkey
SharePoint Site Content Updates and User Documentation
Performed Business Analysis with Project Requirements

LinkedIn: https://www.linkedin.com/in/kamali-ratnayake-43a74340/

JEET
HITESH

KNOWLEDGEWARE LIMITED: Semester Two

Software Engineer (Full Stack Developer)
Internship: Bachelor of Applied Information Technology
Supervisor: Joshua M Aguilar

Abstract: During my internship at Knowledgeware Limited, I contributed to the full software development lifecycle to build a cross-platform application using C# and .NET MAUI, following MVVM architecture and secure-by-design principles. I worked from initial requirements and an MS Access prototype through to solution design, infrastructure setup, and implementation. I configured development environments, managed certificates and keys, and selected appropriate frameworks and NuGet packages to support full-stack development.

I integrated PostgreSQL via Entity Framework Core, Azure Blob Storage, and external APIs like OpenAI. Working within an Agile delivery framework, I maintained high levels of collaboration and documentation. This experience strengthened my technical capability, problem-solving, soft-skill and overall ability to deliver practical, secure solutions within a structured, team-oriented environment.

KEY TASKS

C# Apps with PostgreSQL Cross-Platform Development
Agile Teams Collaboration with DevOps Backlogs and Boards
Wiki DevOps Documentation Portal Handover

LinkedIn: https://www.linkedin.com/in/jeet-khoda

KAJAL RIKENKUMAR
SONI

MEARTANZ PROJECT: Semester Two

Full Stack Developer
Internship: Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: This project, developed for Andrew Buchanan-Smart, involved the full-stack development and integration of a web-based information system designed to manage and visualize structured data efficiently. The system was built using React for the frontend and Django REST Framework for the backend, with a MySQL database supporting data storage and retrieval. My primary role focused on creating a responsive and intuitive user interface, integrating backend APIs with database models, and ensuring seamless communication between system components.

Emphasis was placed on building a secure and scalable architecture by applying minimal CIS security standards and optimizing both frontend and backend performance. Through this implementation, the project demonstrated strong alignment between usability, data management, and system reliability, offering a cohesive and secure platform suitable for real-world IT applications.

KEY TASKS

Responsive Frontend Development with UI Design
Database Models with backend API Integration
CIS Security Implementation and Compliancy

LinkedIn: https://www.linkedin.com/in/kajal-soni-9b3055171/

MEARTANZ PROJECT: Semester Two

DULASHA DEVENI PATHTHINI WASAM

Database Developer & Software Tester
Internship: Postgraduate Dip. of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage

Abstract: As a Database Developer and Software Tester for the MEARTANZ project, under Andrew Buchanan-Smart, I was responsible for designing and implementing a relational database to support the project's data driven functionality. My key tasks included developing an Entity Relationship Diagram (ERD), building a normalized MySQL database schema, and applying data validation with MySQL Workbench.

KEY TASKS

Database Design and Implementation with MySQL Workbench
Data Preprocessing and Integration with Power BI
Functional, Regression, and API Tests using Postman

LinkedIn:
https://www.linkedin.com/in/dulashadeveni/

I also performed data preprocessing with Power BI and DAX queries to clean, merge, and transform raw datasets before integration. Additionally, I prepared and executed functional, regression, and user acceptance test cases, along with API sanity testing using Postman. This internship enhanced my technical expertise in database design, data analytics, and software testing, while improving my collaboration, analytical, and problem-solving skills.

HAMILTON CITY COUNCIL: Semester Two

JOSH MARK CAMPBELL

Network & Cloud Systems Support
Internship: Bachelor of Applied Information Technology
Supervisor: Stewart Hardie

Abstract: During my internship with Hamilton City Council, I gained hands-on industry experience through two key projects. The first project involved supporting a large-scale DNS migration, which required careful planning, coordination, and communication through the Council's change management process. I also assisted with Aruba Access Point mapping to optimise network infrastructure. The second project focused on developing a method to store live sensor data and integrate it with a Copilot AI agent to notify users of outages in real time. This required extensive research, troubleshooting, and testing to ensure reliable flow and performance.

Overall, this internship enhanced my technical, analytical, problem-solving, and soft skills I learned from the Centre for Information Technology at the Waikato Institute of Technology.

KEY TASKS

Migrate DNS Records to Azure
Support consistency of AP placements on Aruba
Developed AI Copilot Agent to monitor network

LinkedIn: https://www.linkedin.com/in/josh-campbell-6b0816320/

UDAY PRATAP SINGH

HAMILTON CITY COUNCIL: Semester Two

Information Management & Compliance Analyst Internship: Master of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: As part of my internship with the Information Management & Compliance Platform at Hamilton City Council, I worked on the Protected Records Review – Class 8 (Governance and Democratic Representation Records) project. My role focused on collecting, organizing, and analysing council meeting records to identify data duplication and improve record accuracy. I used Python scripting to extract Council Meeting data (Agendas, Minutes & Reports) from the Council website and compiled metadata from SharePoint repositories into structured Excel sheets. I conducted duplication analysis on Council meeting and general folders and created Power BI visualizations to present duplication trends and data distribution. My work supported compliance with the Public Records Act 2005 and contributed to enhancing the reliability, accessibility, and efficiency of Hamilton City Council's digital record management. This was a joint internship project with Rajitha Gunasekara.

KEY TASKS

Organised council records with Python and SharePoint
Performed Duplicate Analysis on SharePoint Storage
Power BI Dashboards Visualisation

LinkedIn: https://www.linkedin.com/in/uday-pratap-singh-036ba11a0/

RAJITHA GUNASEKARA

HAMILTON CITY COUNCIL: Semester Two

Information Management & Compliance Analyst Internship: Master of Applied Information Technology
Supervisor: Basundhara Rai

Abstract: During my internship with Hamilton City Council's Digital Services team, I contributed to the Protected Records Review – Class 8 project by applying advanced data analysis and automation techniques. I developed Python scripts in Google Colab for council web data extraction, conducted large-scale data cataloguing in SharePoint, and performed duplication analysis across multiple repositories. Using C#, I built a standalone application to automate file duplication detection on the HCC file server.

I further utilized Power BI to visualize and present analytical insights to stakeholders. This internship strengthened my technical proficiency in Python, C#, Power BI, and data governance practices while enhancing my ability to manage and optimize digital information systems in a government environment. This was a joint internship project with Uday Pratap Singh.

KEY TASKS

Data Extraction with Python Web Scraping Scripts
C# Standalone App for Duplication, Detection, and Automation
Power BI Dashboard Visualisation

LinkedIn: https://www.linkedin.com/in/rajithayag/

HAMILTON CITY COUNCIL: Semester Two

JOSHUA DAVID SORENSEN

Network & Cloud Systems Support
Internship: Bachelor of Applied Information Technology
Supervisor: Stewart Hardie

Abstract: During my internship with the Hamilton City Council Cloud and Network Team, I contributed to two projects and supported Network Engineers with some business as usual (BAU) tasks. The first project involved migrating DNS records from various vendors to Microsoft Azure. This involved planning, communication, configuration, and coordination through the change management process. For the second project, I moved on to developing an AI-based monitoring tool. This involved writing PowerShell Scripts to extract data from a web portal, exporting this to a database, and training an AI Agent to retrieve the data at the request of a user. This required a lot of problem solving and authorisation requests for various systems to communicate with each other. Additionally, I helped with some tasks such as mapping access points in the various facilities that the Digital Services Network Engineers support.

KEY TASKS

DNS Migration to Microsoft Azure
Designed and implemented an AI-based Monitoring Solution
Mapped Access Points in HCC Facilities

LinkedIn: https://www.linkedin.com/in/joshua-sorensen-17a0b02a3/

CFIT (WINTEC): Semester Two

HAOWEI YE

IoT Systems Architect
Internship: Bachelor of Applied Information Technology
Supervisor: Stewart Hardie

Abstract: In collaboration with Jiaben Wang, we co-developed a smart lighting control system that integrates both hardware and software components. Together, we created an IOT solution using ESP32 microcontrollers, sensors, and cloud services to enable intelligent lighting automation and multi-platform control.

During our project, I successfully developed the smart lighting system using the ESP32 microcontroller. Specifically, I used the Arduino IDE for programming the interface to implement both manual control and sensor-based automatic control of LEDs. Using the MQTT protocol, I connected the ESP32 to the OneNet cloud platform, enabling online device monitoring and data analysis. I compiled detailed technical documentation including deployment guides and code repositories, laying the groundwork for future project expansion. Our project is now ready for integration into future IoT curriculum teaching.

KEY TASKS

Arduino IDE Software and Hardware Integration
Establishing connection with the OneNet Cloud Platform
Technical Documentation and Maintenance Guidelines

LinkedIn: https://www.linkedin.com/in/haowei-ye-672427353/

JIABEN
WANG

CFIT (WINTEC): Semester Two

IoT Data & Cloud Engineer
Internship: Bachelor of Applied Information Technology
Supervisor: Stewart Hardie

Abstract: In collaboration with Haowei Ye, we co-developed an intelligent lighting system. Together, we designed an IoT solution using microcontrollers, sensors, hardware, software, and cloud services to achieve automated dimming, scheduling, and intelligent lighting control.

My contribution towards our project focused on creating a cloud-based data storage platform using Google Colab as the central database for real-time data uploading. I designed a web dashboard to display the collected data in an interactive and organized format for easy monitoring and analysis. By integrating Wi-Fi data transfer, cloud storage, and online visualisation, our project demonstrated a complete IoT workflow from data collection to cloud management. Our work showcased the effective use of ESP32 technology in developing smart IoT systems with practical cloud-based monitoring and data visualization capabilities.

KEY TASKS

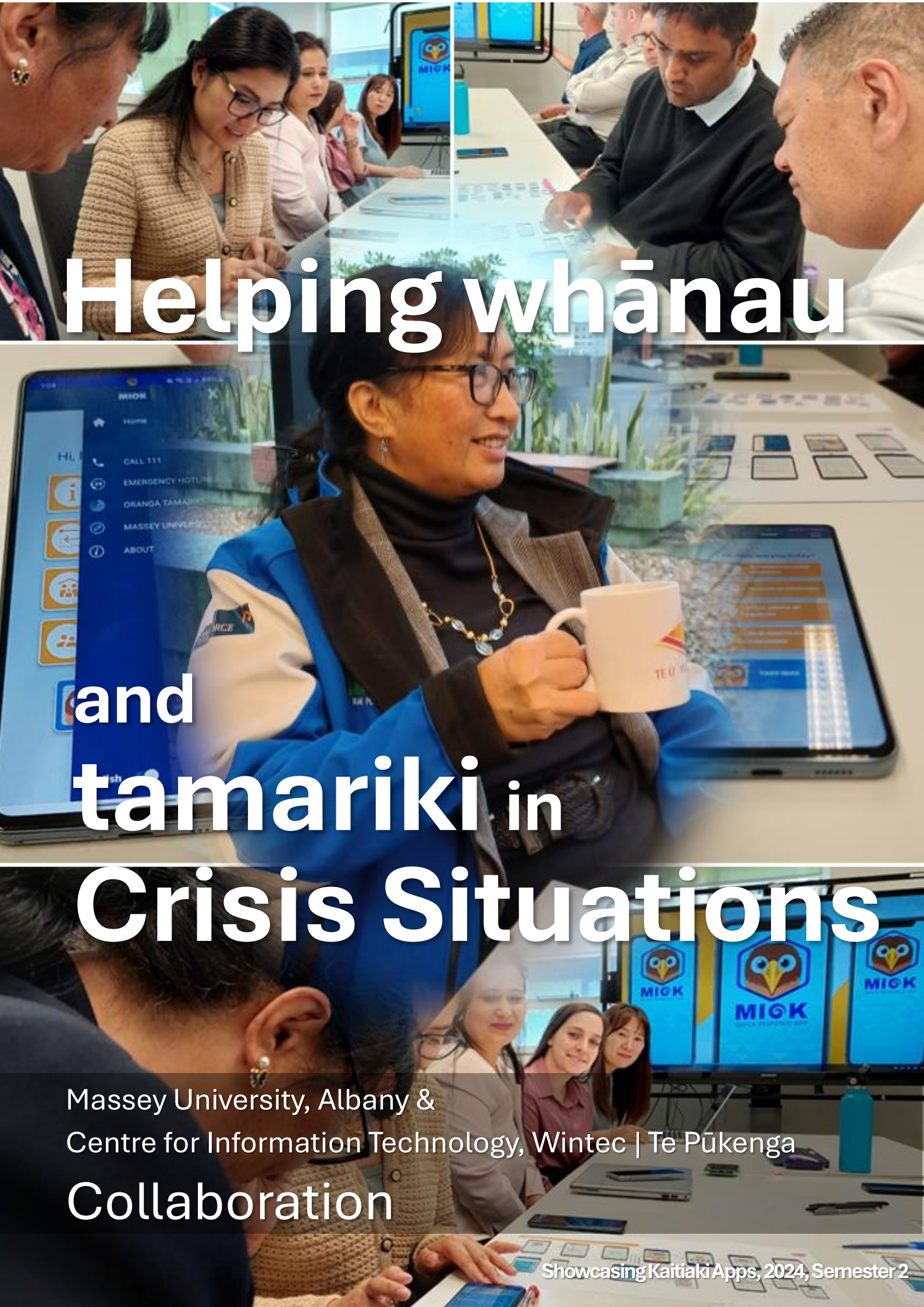
Website Dashboard Visualisation Development
ESP32 Microcontroller WiFi Data Capture
Google Colab Real-Time Database Hosting

Internship and IT Projects in Listing for Semester Two

We recognise the continued contributions of our Semester Two interns and acknowledge those who preferred not to be profiled. The following table lists students who completed internships and IT projects.

Stakeholder	Student	Stakeholder	Student
CfIT (Wintec)	Aidan Luke	Fonterra	Michael Nelson
ITS	Andrew Gatenby	CfIT (Wintec)	Minseong Kim
CfIT (Wintec)	Ankit Ankit	Fonterra	Morgan Hodgson
Gallagher	Arohaina Bagley	CfIT (Wintec)	Nitish Rana
Sports Club	Arun Kurian	Pearl Innovations	Prabhdeep Singh
CfIT (Wintec)	Arun Pradhan	Gallagher	Rehan Tharindu
CfIT (Wintec)	Bailey Couchman	REGEN Computers	Ryan Quinn
Gallagher	Caleb Borst	GDC Consultants	Shanal Rathnaweera
Thrill Capital	Ethan Peebles		
CfIT (Wintec)	Fadi Lazar		
Fusion Networks	Honza Andrews		
ITS	James Howard		
iSim	Jonty Nguyen		
Pearl Innovation	Krish Jariwala		
iSim	Logan Polazcuk		
iSim	Louryn Nathan		
Bridged IT Services	Mansimmar Singh		
iSim	Mathew Herbett		
CfIT (Wintec)	Mathew Stimpson		
iSim	Melissa Wood		

Making the right Connections



Helping whānau and tamariki in Crisis Situations

Massey University, Albany &
Centre for Information Technology, Wintec | Te Pūkenga

Collaboration

Showcasing Kaitiaki Apps, 2024, Semester 2

AWAI - Our Collaboration

E tipu e reā mo ngā rā o tō ao —
Thrive in the day destined to you

Now in its second year, the AWAI - Awhi Whānau, Awhi Iwi research collaboration, led by Professor Fiona Te Momo from Massey University Albany in partnership with the Centre for Information Technology at Wintec | Te Pūkenga, continues to explore digital solutions grounded in Māori values to support Tamariki, whānau, and iwi. Building on the first year's outcomes, this phase continues to examine prototype submissions to identify emerging themes that inform new research propositions.

PROF. FIONA TE MOMO

Four central themes are emerging: implementation limitations, implementation strategies, cultural and indigenous UI design, and user context in designing for children and teenagers in high-stress or vulnerable conditions. These findings deepen understanding of how Māori worldviews can authentically guide digital innovation while addressing challenges in social services and community wellbeing, contributing to equitable and culturally aligned digital systems across Aotearoa New Zealand.

Our 2025 Semester One and Two COMP709 Mobile Development students built on this unique opportunity to lead AWAIs' initiative by designing, developing, implementing, and showcasing an Information and Crisis Quick Response Prototype App. Through a Work Integrated Learning and Project-Based Learning framework, adapted to reflect Māori-themed assessments within the Mātauranga Māori in Information Technology (MMIT) pedagogy, students collaborated in mātauranga Māori whānau groups to produce their final product. The table below outlines each group and its members.

Semester One

Manaaki Rangatahi	Kakapo Kaitiaki
• Arohaina Bagley	• William Armstrong
• Bailey Couchman	• Krish Manish Jariwala
• Mathew Herbert	• Jeet Hitesh Khoda
• Minseong Kim	• Arun Kurian
• Aidan Luke	• Tharindu Rehan
• Louryn Nathan	• Shanal Rathnaweera
• Ethan Peebles	• Prabhdeep Sachdeva
• Mathew Stimpson	• Jonty Southcombe-Nguyen
	• Melissa Wood

Semester Two

Rōpū Tahi Taupānga
• Angus Bruns
• Koell Cresswell
• Hamish Gibbard
• Kooti Harris
• Aumkumar Navinbhai Patel

Masters
Research

Whakatōkia tō ara,
whakatutukihia te mauri ora

Forge your path, achieve life's success

Our Masters Students

Our Master of Applied Information Technology prepares students for advanced IT roles through substantial research for doctoral studies, and project research, emphasizing industry readiness with opportunities for internships. We equip graduates with the expertise needed for leadership roles in areas such as business intelligence, data analytics, IT management, and software development. The following profiles showcase master's students who have shared their experiences and discoveries with our research community.

Predicting Uber Passenger Pickup Patterns Using Machine Learning

GAMITH CHANDULA DE SILVA

Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal
Status: Completion in 2025

Abstract: This research focuses on optimizing Uber's operations by addressing challenges in resource allocation and service efficiency. A predictive model was developed to forecast passenger demand by integrating temporal, spatial, and environmental factors. The study applies machine learning techniques, including Random Forest and XGBoost, to analyze historical data and identify high-demand zones and peak times. Additionally, the research enhances Uber's driver notification system, aiming to reduce response times and improve service quality.

Research Question

Does incorporating temporal, spatial, and environmental variables enhance demand prediction accuracy and operational efficiency in urban mobility systems?

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The findings demonstrate that incorporating external variables significantly improves demand prediction accuracy and operational efficiency. This leads to increased driver productivity, higher customer satisfaction through reduced wait times, and provides policymakers with actionable insights for urban planning. The research presents a scalable framework for optimizing ride-hailing services and contributes meaningfully to the field of urban transportation.

DANA ROXAS

Job Applicants' Perceptions of AI Interviews: A Sentiment Analysis and Topic Modelling

Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal
Status: Completion in 2025

Abstract: As artificial intelligence (AI) becomes increasingly integrated into recruitment processes, understanding how job applicants perceive AI-driven interviews is critical to evaluating their effectiveness and acceptance. This research aims to explore these perceptions by analysing comments from Reddit. A total of 3,143 comments were scraped using Python and Reddit API. Sentiment analysis was conducted using VADER to categorize comments as positive, negative, or neutral, while topic modelling using LDA identified key themes. Data was analysed using Python with libraries such as NLTK. Results showed that 43.4% of the comments were negative, 32.1% positive, and 24.5% neutral. Four main topics emerged, with three reflecting negative sentiment and one showing a mixed sentiment. This study highlights applicants' concerns and the critical need for organizations to improve systems and processes regarding AI interviews.

Research Question

RQ 1. What are the job applicants' sentiments regarding AI interviews?
RQ 2. What topics are associated with the perceptions of AI interviews among job applicants?

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DIMITHRI WELLAGE

Identifying Best Prompt Engineering Technique (PET) and LLM for Ransomware Risk Management Queries

Master of Applied Information Technology
Supervisor: Dr. Micheal Bosu
Status: Completion in 2025

Abstract: The aims of this research were twofold: (1) to compare the accuracy of responses generated by various LLMs on ransomware-related queries, identifying whether certain models (e.g., GPT-4, Claude, etc.) provide superior performance; and (2) to evaluate the effect of different prompt engineering techniques (Input-Output, Chain-of-Thought, Tree-of-Thought) on the accuracy of LLM responses in the ransomware risk management context.

These objectives reflect a comprehensive inquiry into both which AI model and how the querying method influence the quality of cybersecurity guidance provided.

Research Question

Which prompt engineering technique and LLM yield the most Accurate results in detecting and responding to ransomware related queries?

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A Comparative Study of ML Models for Lung Cancer Diagnosis: The Effect of SMOTE on Imbalanced Data

METHTHANI RANASINGHE

Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal
Status: Completion in 2025

Abstract: Class imbalance is a critical challenge in medical datasets where the minority class often represents life-threatening conditions like cancer. This study examined the effect of using SMOTE to balance the Survey Lung Cancer Dataset before training machine learning models. The models were evaluated on both imbalanced and SMOTE-balanced data, and results showed that balancing improved overall performance, especially in reliably identifying cancer cases.

However, not all aspects of model performance improved consistently, indicating that the impact of balancing can vary. These findings highlight the need for data balancing and multiple evaluation methods to build fair and reliable models.

Research Question

How do different machine learning models perform in predicting lung cancer when trained on imbalanced versus balanced data?

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https://www.linkedin.com/in/meththaniranasinghe/

Forecasting Hydro and Wind Energy Generation in NZ's Power System using SARIMA and ANN Models

NUWAN SAMARASINGHE

Master of Applied Information Technology
Supervisor: Dr. Diab Abuaiadah
Status: Completion in 2025

Abstract: Renewable energy is the backbone of New Zealand's power grid. Accurate forecasting improves grid efficiency and stability. Using SARIMA and ANN models, this study focused on short-term wind and hydro energy forecasting. It used 519 weeks of data from NASA POWER and the EMI system (2015–2025), covering both the North and South Islands. Experiments were conducted using Python on the Anaconda platform. Forecasting models were trained and tested using time-encoded features, historical energy output, and climate variables. Performance was measured using MAPE. Results show ANN outperformed SARIMA. For wind forecasting in the North Island, ANN reduced MAPE to 23.40%, while for hydro forecasting in the South Island, ANN achieved 4.72%, slightly outperforming SARIMA (4.97%). The study demonstrates ANN can enhance renewable energy forecasting in New Zealand.

Research Question

RQ 1. Which model, SARIMA or ANN, more accurately predict renewable energy generation in NZ under climate influence?
RQ 2. Which climate-related features enhance SARIMA and ANN predictive accuracy for wind and hydro power forecasting?

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PUJA
BHANDARKAR

Comparative Analysis of Ensemble ML Models for detecting early stages of Coronary Heart Disease

Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal
Status: Completion in 2025

Abstract: Coronary heart disease (CHD) remains the leading global cause of death. Traditional linear models fail to capture the complex, non-linear relationships among risk factors, creating demand for predictive tools that shift diagnosis from reactive to proactive. This study compares three ensemble Machine Learning (ML) models—Random Forest (RF), eXtreme Gradient Boosting (XGBoost), and Light Gradient Boosting Machine (LGBM)—using 1,000 real-world patient records. Without hyperparameter tuning, all models overfitted, achieving 100% training accuracy but under 33% test accuracy. RF showed greater robustness (33.0%) than XGBoost (24.5%) and LGBM (22.5%), supporting its superior variance reduction mechanism. Results highlight the need for K-Fold Cross-Validation and Grid Search to improve generalisation and establish reliable CHD risk prediction for clinical application.

Research Question

What are accuracy levels of Random Forest, XGBoost, LGBM ML models, and which of these are the better fit while detecting diseases?

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DEVINA
PAI

Evaluating the Predictive Impact of Lifestyle Features on Type 2 Diabetes Prediction

Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage
Status: Completion in 2025

Abstract: This study improves early detection of Type 2 Diabetes Mellitus (T2DM) by integrating clinical and lifestyle data to address gaps in existing predictive models. Using a dataset including stress, sleep quality, and physical activity, rigorous feature selection and machine learning methods were applied. The Random Forest model achieved the best performance, with 96.07% accuracy and a ROC-AUC above 0.96. Results highlight the value of combining lifestyle and clinical factors for holistic prediction. The strongest predictor was the combined effect of stress and sound sleep, emphasising lifestyle management in T2DM prevention. Overall, integrated data-driven models enhance early diagnosis, support proactive intervention, and strengthen healthcare decision-making.

Research Question

RQ 1. How consistent are feature selection methods in identifying key lifestyle predictors of type 2 diabetes?
RQ 2. Which features improve ML predictive performance?
RQ 3. Which model performs best with lifestyle and clinical data?

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Cross-Crop Evaluation of CNN, SVM and Random Forest Models for Crop Pest and Disease Detection

DARRWIN DELAPERLIE

Master of Applied Information Technology
Supervisor: Dr. Anuradha Madurapperumage
Status: Completion in 2025

Abstract: This paper develops a deployable 20-class crop-disease classifier using a compact transfer-learned CNN (MobileNetV2/EfficientNet-B0, 224×224). Training follows two phases: head-only warm start at a higher learning rate and partial unfreezing with ReduceLROnPlateau and EarlyStopping to stabilize generalization. To separate representation from decision rule, linear SVM and Random Forest baselines are trained in parallel on 1280-D CNN embeddings after StandardScaler?PCA (~256). A fixed ?1.5k-image validation split and saved artifacts ensure reproducibility. Results show ~95% validation accuracy for the CNN (micro-AUC ?0.998; macro-AUC ?0.989), with SVM close behind. Calibration via temperature scaling and threshold sweeps yields clear operating policies and selective compute. Main limitations: single-site validation and class imbalance.

Research Question

RQ 1. How do CNN, SVM, and RF models compare on macro-averaged accuracy, precision, recall, and F1 across five crops?
RQ 2. What is each model's per-image latency, throughput, size, parameters, and peak RAM on GPU and edge-like CPU?

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Feature Selection Optimisation for Improved Disease Prediction Accuracy

NEETHU KOCHAYYATHU SIVENDRAN

Master of Applied Information Technology
Supervisor: Dr. Micheal Bosu
Status: Completion in 2025

Abstract: Heart disease remains a leading global cause of death, highlighting the need for accurate and interpretable predictive models. This study compares traditional and advanced feature selection techniques to enhance heart disease prediction. Five advanced methods (Boruta, mRMR, SHAP, PSO, GWO) and five traditional methods (ReliefF, RFE, LASSO, Chi-square, PCA) were applied to four benchmark datasets. Five machine learning algorithms—Logistic Regression, Support Vector Machine, Random Forest, KNN, and XGBoost—were evaluated using accuracy, F1-score, and ROC-AUC metrics. Results reveal that both feature selection categories achieve comparable performance, with Logistic Regression and SVM showing stability. Key predictors such as age, cholesterol, thalach, and oldpeak influence outcomes, supporting transparent, data-driven diagnostics.

Research Question

How do different categories of feature selection methods affect the predictive accuracy of heart disease prediction models?

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DEEPALI
GOYAL

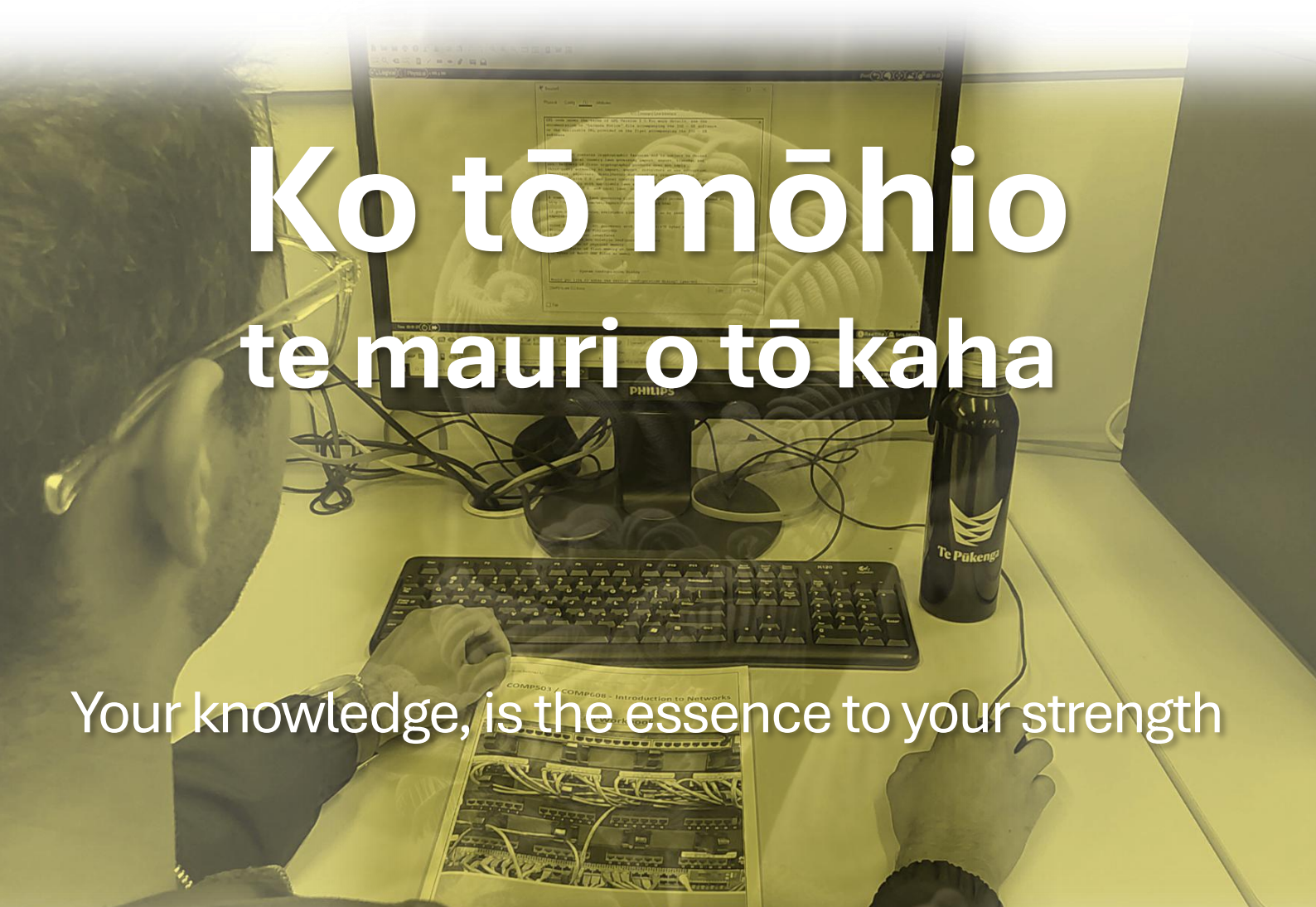
Evaluating Online Engagement Types and their Impact on Academic Performance in Personalised Learning

Master of Applied Information Technology
Supervisor: Dr. Shantha Jayalal
Status: Completion in 2025

Abstract: This paper will focus on online student engagement and academic performance in personalized learning settings. Three engagement indicators, including time spent watching videos, quiz attempts and forum were tested with an extent of 10,000 anonymized records against a composite performance score. Correlation and regression tests indicated that there were weak correlations with coefficients close to zero which showed that behavioural engagement had minimal predictive effects on achievement. Although these variables are based on the available literature, they were not sufficient to account for the differences in performance. The research concludes that research on the topic ought to incorporate the factors of cognitive and emotional engagement in order to come up with more comprehensive models of learning achievement in adapting learning systems.

Research Question

Which types of online engagement most influence student academic performance in personalised learning environments?

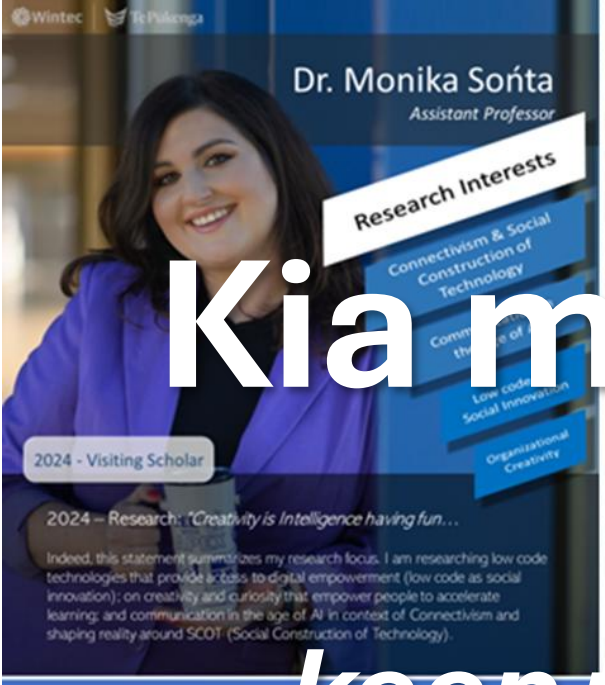


Matauranga Māori in IT

Te Kura mō te Hangarau Whakaaturanga
The Centre for Information Technology

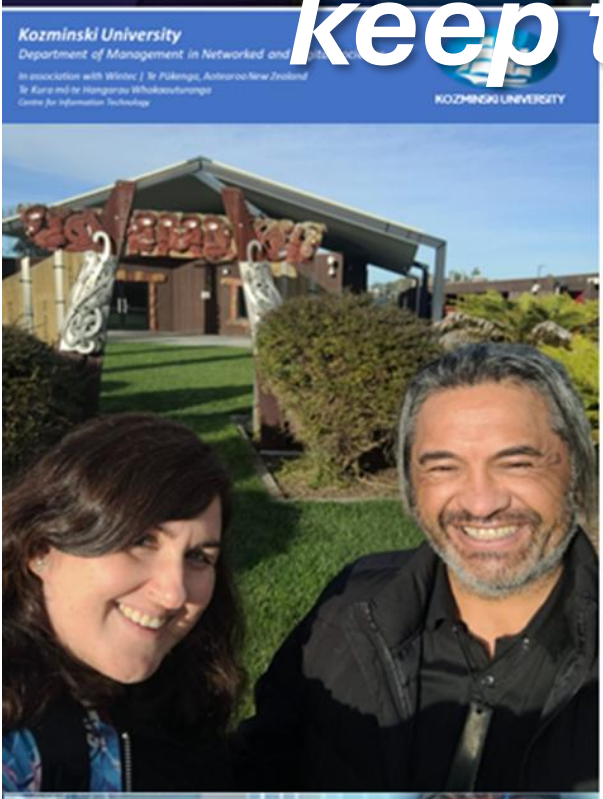
Skills Extending
Past, Present, and Future

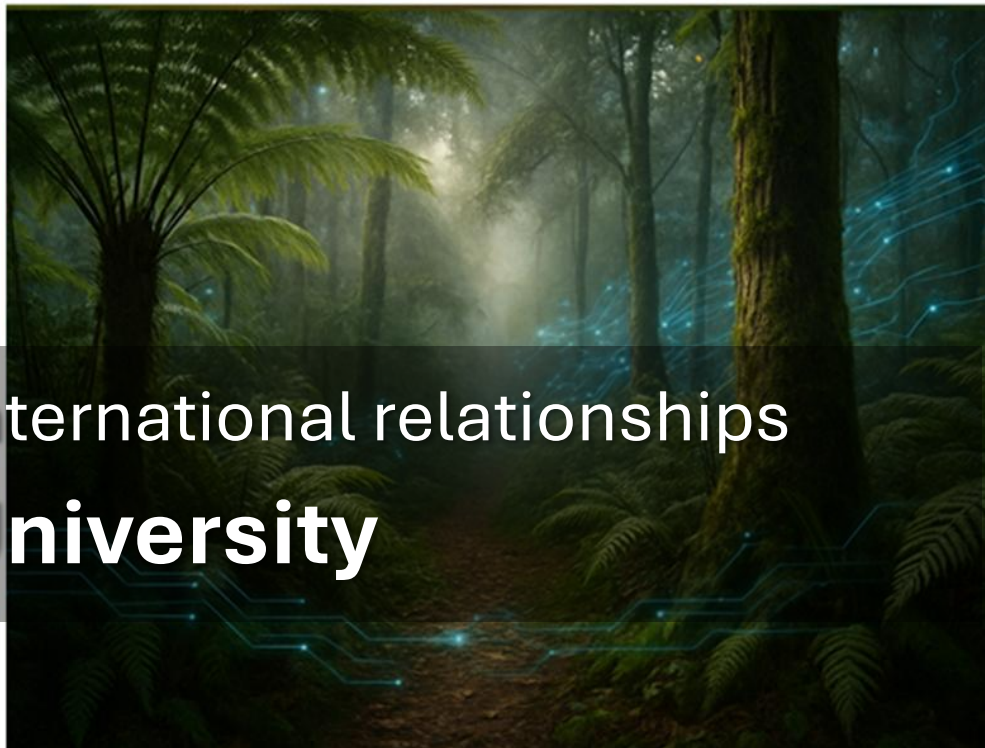
Created with AI-assistance



Kia mau tonu te ahi kā

keep the fires burning





Sustaining our international relationships

Kozminski University

Te Kura mō te Hangarau Whakaauturanga
Wintec

Continuing Partnerships

Indigenous IT in International Waters

In May 2025, the Centre for Information Technology had the privilege of reconnecting with Dr. Monika Sońta, from Kozminski University, Poland, to participate in European Union Week 2025 in Warsaw. This pan-European initiative, titled *"Strengthening European Competitiveness – European Innovation & Foresight Bootcamp"*, brought together policymakers, academics, and students to explore innovation, technology, and education. The program featured thematic lectures, workshops, and collaborative sessions led by experts, including the President of the European Parliament, Roberta Metsola, and Professor Marcin Piątkowski from the World Bank.

As part of the agenda, our Centre's Research Leader, Hamiora Te Momo, presented *"Innovation in Aotearoa, New Zealand: Indigenous Approaches, Sustainability, and Community-Based IT Innovation"* in an online session. He highlighted how Māori knowledge systems and kaupapa Māori frameworks inform technological innovation, emphasizing relational, culturally grounded, and sustainable approaches. Current projects discussed included AWAI – Awhi Whānau & Awhi Iwi, supporting Māori families affected by domestic violence, Wintec IT student research contributions to Massey University, and the MMIT pedagogy framework embedding Māori themes in IT education. He also addressed ethical and spiritual dimensions, including Indigenous data sovereignty, accessibility, and culturally responsible design.

The presentation prompted reflection on how Indigenous perspectives can inform global innovation strategies, offering European audience's practical insights into balancing technological advancement with community engagement, ethical responsibility, and cultural integrity in Aotearoa. This engagement builds on our ongoing international collaboration with Dr. Sońta and Kozminski University, reconnecting pathways for shared research, cross-cultural learning, and collaborative pedagogical initiatives.

DR. MONIKA SOŃTA

KOZMINSKI UNIVERSITY

Wintec

Te Kura Mo Te Hangarau Whakaaturanga

Centre for Information Technology

Te Kura Mo Te Hangarau Whakaaturanga is dedicated to providing dynamic and industry-relevant IT education. Our programmes are designed to meet the rapidly evolving needs of the information technology sector, ensuring that graduates are not only qualified but also equipped with practical skills and professional capabilities essential for the modern workplace.

About the Centre

We understand that today's employers seek more than just academic qualifications; they want professionals who can utilise information and communication technology to solve real-world problems. Our courses, developed in collaboration with industry partners, offer a broad spectrum of computing and IT topics, including software engineering, data science, network infrastructure and architecture, cyber security, data analytics, professional communication, programming, web engineering, project management, and more. This variety allows students to specialize in areas that align with their career goals benefitting from hands-on experience in specialist laboratories.

Our Programmes

We offer a diverse range of undergraduate, graduate, and postgraduate programmes designed to equip students with the skills and knowledge needed in today's IT industry. With our curricula emphasizing hands-on learning, real-world applications, and close collaboration with our industry partners we keep our programmes relevant and aligned with current technological industry trends. Students benefit from personalized learning plans, work-based experiences, and internships that foster professional growth and industry connections.

- New Zealand Certificate in Information Technology
- New Zealand Diploma in Information Technology Technical Support
- Bachelor of Applied Information Technology
- Graduate Diploma in Applied Information Technology
- Postgraduate Certificate in Applied Information Technology
- Postgraduate Diploma in Applied Informatics
- Postgraduate Diploma in Applied Information Technology
- Master of Applied Information Technology

Future Outlook

Our Centre remains committed to continuous improvement, focusing on curriculum relevance, student support, and strong industry partnerships. We aim to expand our national and international outreach dedicating to equity and high-quality education positioning our graduates are well-prepared for successful careers in the ever evolving IT digital age landscape.

Upgrade your mind

build your IT future

Contact Us

For more information about our programmes or to enrol, you can contact us at:

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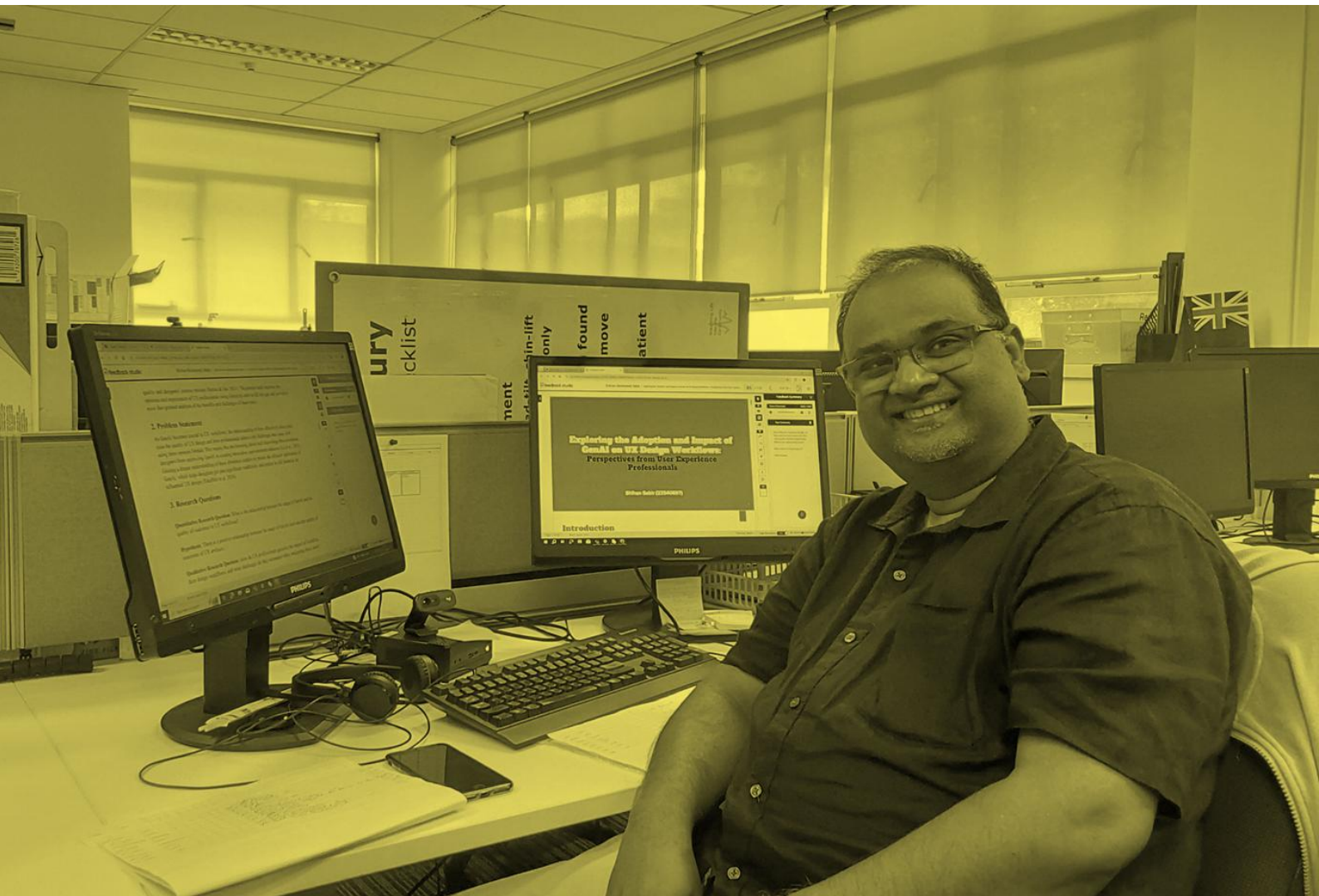
Exploring the Adoption and Impact of
Perspectives from User Experience
Professionals
Introduction
PHILIPS