

## **Contents**

## **Full Papers (Quality Assured)**

Mind the Gap: IT Skills Shortage - Could Cadets Make the Jump? Sarah Snell & Catherine Snell-Siddle	10
Towards Effective Writing Partnerships Between Humans and AI David Wood, Anna Harrison, & Ben Kolera	16
Industry Blended Cyber Education Graeme Legg	22
Internet of Things: Survey, Observations and Future Trends Campbell Rehu & Firas Al-Ali	28
Pair Programming as a Teaching Tool in Programming Courses Premalatha Sampath	37
Accelerating Academic Acculturation and the Development of Self-directed Learning Capability through Collaborative Online Simulation: Student Perspectives Jonathan Sibley, Pii-Tuulia Nikula & Rebekah Dinwoodie	44
Reflections on the Use of Agile Practices and Associated Tools in University Settings for an Android Project Sherlock A. Licorish, Elijah Zolduoarrati, Adriaan Lotter, Kevin Michael, Rohullah Mohammadi, & Nick Alessi	50
Intelligently Derived Features that Influence Students' Perceptions on E-textbooks Neda Abdelhamid, Michael Watts, Dios Cabiling, & Kar Wen Choe	58
Student Impressions of Laptops for Information Technology Students Michael Watts, Diosdado Cabiling, & Kar Wen Choe	64
Reducing the Gap between OOP Design and Development Minjie Hu & Aaron Steele	70
Moodle: An Analysis of Its Utilisation, Benefits, Problems and IT Support as Perceived by IT Students	7.
Rakesh Kumar, Michael Watts, Kar Wen Choe, & Diosdada Cabiling	76
Using Python to Create Formative Assessment Questions for Moodle Simon Burt	82

The Efficacy of Staircasing IT Programmes for the Benefit of Our Community Susan Chard, Tony Assadi, Simon Dixon, Steve Cosgrove, Manu Katene, Lisa Patterson, Sue Scott, & Iwan Tjhin	87
Conceptions of Teamwork and Feedback among International Students Dobrila Lopez, Michael Lopez, Emre Erturk, & Jonathan Sibley	94
In Search of a Strategy for Security in the Cloud Eduardo Correia & Bernard Otinpong	100
Community Development Models Underpinning Community Collaborations in IT Education Samuel Mann, Hamish Smith, Lesley Smith, Nathan Rountree, Tom Flannagan, Chris McCarthy, Rachel Trounsen, Todd Cochrane, Ken Sutton, & Phoebe Eden-Mann	104
Exploring Augmented Reality in Education Viewed Through the Affordance Lens Kathryn MacCallum & John Jamieson	114
Supplementary Papers (Editorial Review)	
Implementing and Evaluating a Framework for Industry Focused ICT Education Alaa Aljanaby, Md Athar Imtiaz, & Chris Mitchell	122
How a Video's Production Impacts Student Engagement Neil Benson & Craig Nicoll	128
Towards a Model for Adoption of APODs in Large Lectures Trevor Nesbit, Billy O'Steen, & Tim Bell	134
He Kākano: A Story of Growth Samuel Mann, Dean Huakau, & Rickie Kewene	148
Position Papers (Abstract/Presentation Only)	
Implementing a Blockchain using Azure Ian Purdon	154
Social Media as a Coping Tool for Nostalgia: the Case of International Students Samuel Ekundayo, & Adesayo Adelowo	155

## **Poster Papers (Editorial Review)**

Maori Values in IT Sadia Afrin & Alison Hunter	157
Applying DMAIC to a Campus-wide Wireless Network Ben Manning & Eduardo Correia	160
Short Courses Initiative of Aspire2 International: Game Development as a Case Study Keunhong Kim, Ahmad Mashayekh, Md Athar Imtiaz, & Alaa Aljanaby	162
Te Tiriti O Waitangi – Impact on IT Soham Sarkar, & Alison Hunter	164
Documentation in Agile Software Development Teams Anchal Gupta & Premalatha Sampath	166
My Shopping Buddy – a Mobile Application for Diabetics Bernard Otinpong & Luofeng Xu	168
Agile Testing Practices in Academia Premalatha Sampath	170
UCOL BICT Network Internship Rupert Woodroffe, Sandra Cleland, & Graeme Richards	172
Computer games as a therapy tool for psychological and emotional disorders Sam Carlyle & Chris McCarthy	174
The Classroom of the Future Tom Outram & Chris McCarthy	176
Heavy Engineering Research Association Internship David Skelton & Tobias Kick	179
Minimizing Synchronization in Parallel Nested Loops Reza Rafeh & Mohammad Hossein Roosta	180
Google Classroom Amandeep Kaur & Emre Erturk	183
What is the vision for AI education resources? How well is it currently being met?  Robert Iles & Emre Erturk	186
Custom Data Solutions Internship  Mark Smith & Emre Erturk	188
ERP System Upgrade for New Zealand Casing Company Limited Brian Vest & Ian Purdon	189
E-learning in New Zealand Undergraduate Medical Education: Trends and Directions Heba Farooq, Md Athar Imtiaz, & Alaa Aljanaby	191
Uptake of Wearable Technology on New Zealand Healthcare Gopal Dongal & Michael Verhaart	194?

Adopting Open Source to implement DevOps toolchain for SMEs in New Zealand Hong Shi & Michael Verhaart	196
A SaaS-Based SCM Solution for New Zealand Small and Medium-Sized Enterprises in Retail-Related Sectors Susumu Mahara & Michael Verhaart	198
An IT Software Development Internship: Programming Project at Red Jungle Andrew Percy & Kim Hagen-Hall	200
Successful Test management is Based on Test Coverage and Test Traceability  Jose Midhun & Kim Hagen-Hall	201
Agile Methodologies in Global Software Development Santiago Obrutsky & Kim Hagen-Hall	203
The Presbyterian Support Central Wi-Fi Network Deployment Ian Hunter & Alan Lyford	205
Augmented Reality in Early Childhood Literacy  Mayank Kumar & Kathryn MacCallum	207
Design & Development of Mobile Learning in Workplace Training for the Logistics Industry  Amanda Price & Kathryn MacCallum	209
Amanua r nee & Kaun yn MacCanum	209