

Kashumi Madampe

PHD IN SOFTWARE ENGINEERING (ABOUT TO COMPLETE) | CONSULTANCY | MIXED-METHODS RESEARCH

Melbourne, Australia

🏠 www.kashumim.com | 🌐 [kashumi-m](https://github.com/kashumi-m) | [in kashumimadampe](https://www.linkedin.com/company/kashumimadampe) | 🐦 [@KashumiM](https://twitter.com/KashumiM)

Human-centric Software Engineering and Agile Research

Monash University | University of Auckland

Australia | New Zealand

PHD CANDIDATE

Jan 2019 - Mar 2022

- Conducting mixed-methods research with the participation of 250+ software engineers to improve software engineering practices (See *Education* section for further details)

University of Auckland

New Zealand

RESEARCH ASSISTANT

Mar 2019 - Dec 2019

- Working on Agile Software Development publications
- Writing business cases at the Case Center, Business School

Industry Experience

myDigitalOffice

Bethesda, USA (Division: Sri Lanka)

ASSOCIATE CONSULTANT (PRODUCT/PROJECT/TEAM MANAGEMENT, BUSINESS ANALYSIS)

May 2016 - Jan 2019

- **Project Domains:** Quality Management, Task and Time Tracking, Human Resources, Hospitality – business dashboards, paperless night audit systems
- Business analysis of new and existing projects – gathering requirements, analysing the requirements, analysing the gap
- Root cause analysis and coming up with solutions for the identified root causes
- Presenting solutions to clients
- Technical writing
- Designing user interfaces and prototyping
- Researching new technologies and project management aspects to improve the productivity
- Refining processes to improve processes within the projects and the company to optimize the current practices through automation
- Managing projects of software development and system support from planning to closure of the projects in traditional project management, agile – Scrum and Kanban, and hybrid project management approaches
- Managing locally and globally distributed teams
- Adapting to new domains and coming up with strategies to adhere to problems existing in the domains to improve business
- Practising MUDA waste management strategy to reduce the waste in processes within the company

SriLankan Airlines

Katunayake, Sri Lanka

SYSTEM ANALYST INTERN

Nov 2015 - May 2016

- **Project Domain:** Human Resources Systems and Administration
- Researching new developments in the industry and suggest features to improve productivity and efficiency of Human Resources Systems and Administration department
- Studying existing business process and proposing solutions to improve the process
- Identifying the gaps and validating against the industry best practices to improve the business
- Cleansing data to identify in-system and off-system data
- Technical writing
- Supporting end users

Nibaya

Calgary, CA (Division: Sri Lanka)

BUSINESS ANALYST TRAINEE

Nov 2014 - Nov 2015

- **Project Domains:** GPS Tracking, POS, Oil and Gas, Transportation
- Researching similar systems existing in the industry which tally with the systems to be developed
- Analysing systems to be developed and the existing systems to be replaced in order to identify the gaps
- Technical writing
- Developing user stories, use cases, system requirement specification
- Designing user interfaces
- Assisting project management tasks

Academic Experience

Monash University

Melbourne, Australia

MAIN SUPERVISOR OF UNDERGRADUATE RESEARCH AND DEVELOPMENT PROJECTS

July 2020 - November 2021

- Supervising a research project of final year Bachelor of Software Engineering students (2 teams over 2 semesters): *A Trello power-up to capture emotions of agile teams*
First team's publication: Mohammed-Amr Abd El-Migid, Damon Cai, Thomas Niven, Jeffrey Vo, **Kashumi Madampe**, John Grundy, Rashina Hoda (2021): *Emotimonitor: A Trello Power-Up to Capture and Monitor Emotions of Agile Teams*. *Journal of Systems and Software*.

University of Auckland

Auckland, New Zealand

GRADUATE TEACHING ASSISTANT

July 2019 - Dec 2019

- Liaising with industry partners for student projects
- Test invigilation and assignment/ exam marking of undergraduate Engineering courses: Agile and Lean Software Development, Electrical and Digital Systems

Education

Monash University

Melbourne, Australia

PH.D. IN SOFTWARE ENGINEERING – TRANSFERRED FROM UNIVERSITY OF AUCKLAND, NEW ZEALAND

Jan 2020 - about to complete

- **Thesis:** Understanding Requirements Changes and Emotional Responses to Requirements Changes in Software Teams
- **Key Contributions:** A taxonomy of requirements changes, exploration of emotional intelligence and emotional dynamics in handling requirements changes, a tool to capture emotions and manage the captured emotions, practical recommendations on emotion-centric techniques to handle requirements changes
- **Approach:** Data collection through interviews, and surveys followed by Grounded Theory, and statistical analysis

University of Auckland

Auckland, New Zealand

PH.D. IN COMPUTER SYSTEMS ENGINEERING – CANDIDATURE CONFIRMED

Jan 2019 - Dec 2019

- **Thesis:** Understanding Requirements Changes in Agile Software Development
- **Approach:** Data collection through interviews followed by Grounded Theory analysis

Sabaragamuwa University of Sri Lanka

Belihuloya, Sri Lanka

BSc.(SPECIAL) IN COMPUTING AND INFORMATION SYSTEMS – FIRST CLASS

Oct 2011 - Mar 2016

- **Thesis:** Business Process Optimisation of Human Resources Systems and Administration
 - **Approach:** Data collection through interviews and observations followed by thematic analysis
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- **Mini Project:** Research on Brain Computer Interface
 - **Approach:** Analysis of an existing EEG dataset using Machine Learning techniques

Skills

Project Management and Business Analysis Skills

Documentation and Specification	Project Documents, Technical Writeups, End User Manuals
Analysis Techniques	User Stories, Use Cases, As-Is Analysis, To-Be Analysis, Gap Analysis
Visual Modelling	Sequence Diagrams, Use Case Diagrams, Work-flow Diagrams, Prototypes
Project Management Skills	Project Plan, Work Breakdown Structure (WBS), Effort/Cost Estimation, Scheduling, Change Control Management
Business Process Modelling	Business Process Model and Notation (BPMN)

Research Skills

Participant Recruitment	Familiar with recruiting participants from Amazon Mechanical Turk
Data Collection Techniques	Interviews, Surveys, Observations
Data Analysis Techniques	Grounded Theory, Thematic Analysis, Statistical Analysis

Technical Competency

Familiar Languages	Python (currently using for data analysis), Java, JavaScript, HTML, MySQL
Familiar IDEs	Visual Studio Code, Spyder, Matlab, NetBeans
Version Controlling Tools	GitHub, Tortoise SVN
Project Management Tools	Jira, Trello, Microsoft Project, Mindjet, Bitrix24, Producteev, Kanbanflow, TeamWork
Data Analysis Tools	NVivo, MAXQDA, Microsoft Power BI, Tableau
Visual Modelling Tools	IBM Rational Rose Enterprise Edition, Microsoft Visio, Balsamiq Mockups, Sketch

Achievements and Awards

Monash University

- International Postgraduate Research Scholarship awarded by Faculty of Information Technology

University of Auckland

- *Colombo Plan in Engineering* Scholarship awarded by Faculty of Engineering in 2019
- *Student Support Award* awarded by Faculty of Engineering in 2019
- Finalist at *Exposure* - Postgraduate Research Competition in 2019

Sabaragamuwa University of Sri Lanka

- Third Place - Best Performer at final year defense presentation in 2016

Microsoft

- Awarded as one of the top 10 application development experts in Microsoft Learning in Sri Lanka in 2013
- Awarded as one of the top 10 infrastructure experts in Microsoft Learning in Sri Lanka in 2013

Publications

Journals

- **Kashumi Madampe**, Rashina Hoda, and John Grundy (2021): *A Faceted Taxonomy of Requirements Changes in Agile Contexts*. *Accepted for publication: IEEE Transactions on Software Engineering*.
- **Kashumi Madampe**, Rashina Hoda, and John Grundy (2021): *The Emotional Roller Coaster of Responding to Requirements Changes in Software Engineering*. *Under Review: IEEE Transactions on Software Engineering*.
- **Kashumi Madampe**, Zainab Masood, and Rashina Hoda (2021): *The Role of Scrum Master in an Industry Project based University Course*. *Under Review: Journal of Systems and Software*.
- **Kashumi Madampe** (2017): *Successful Adoption of Agile Project Management in Software Development Industry*. *International Journal of Computer Science and Information Technology Research*. 5. 27-33.

Conferences

- **Kashumi Madampe**, Rashina Hoda, and Paramvir Singh (2020): *Towards Understanding Emotional Response to Requirements Changes in Agile Teams*, New Ideas and Emerging Results Track, *42nd IEEE/ACM International Conference on Software Engineering 2020, Seoul, South Korea*
- **Kashumi Madampe**, Rashina Hoda, John Grundy, and Paramvir Singh (2020): *Towards Understanding Technical Responses to Requirements Changes in Agile Teams*, CHASE workshop, *42nd IEEE/ACM International Conference on Software Engineering 2020, Seoul, South Korea*
- **Kashumi Madampe**, Rashina Hoda, and John Grundy (2020): *Towards Better Understanding of Agile Teams through Behavior Change Models*, HCSE-CS workshop, *35th IEEE/ACM International Conference on Automated Software Engineering 2020, Melbourne, Australia*

Other

- **Kashumi Madampe** (2021): *Handling Requirement Changes in Agile Software Development Projects: Preliminary Results from an Interview-based Industrial Study*. Lightning Talk, Australasian Computer Science Week 2021.
- **Kashumi Madampe** (2021): *Towards Understanding Technical Responses to Requirements Changes in Agile Teams*. Poster, Agile20 Reflect Festival.
- **Kashumi Madampe** (2020): *Managing Software Requirements Changes in a Human-Centric Way*. Presentation, Monash University.

Participations

Hackathons

- *Spiralation Hackathon* at **World Conference on Youth** in 2014
- *Women's Hackathon* by **Microsoft and US Embassy of Sri Lanka** in 2014

Competitions

- *Visualize Your Thesis* - Competed at University Level: **Monash University** in 2020
- *Exposure* - Postgraduate Research Competition by **University of Auckland** in 2019
- *Security Quiz* by **Sri Lanka Computer Emergency Readiness Team (SLCERT)** in 2014
- *Microsoft Tech Elite - South Asian region* by **Microsoft Learning Academy** in 2013

Service

23rd Internal Conference on Agile Software Development

PROGRAM COMMITTEE MEMBER

Copenhagen, Denmark

2022

15th International Conference on Cooperative and Human Aspects of Software Engineering

PROGRAM COMMITTEE MEMBER

Pittsburgh, USA

2022

Journal of Systems and Software

PEER REVIEWER

Jan, 2022 - Present

ACM Computing Surveys

PEER REVIEWER

Oct, 2021 - Present

Automated Software Engineering Journal

PEER REVIEWER

Aug, 2021 - Present

22nd International Conference on Agile Software Development

POSTER CO-CHAIR

Virtual

2021

36th IEEE/ACM International Conference on Automated Software Engineering

PUBLICITY AND SOCIAL MEDIA CO-CHAIR

Melbourne, Australia

2021

14th International Conference on Cooperative and Human Aspects of Software Engineering

SOCIAL MEDIA CHAIR, PROGRAM COMMITTEE MEMBER

Madrid, Spain

2021

4th International Workshop on Affective Computing in Requirements Engineering

PROGRAM COMMITTEE MEMBER

Virtual

2021

ACM CHI Conference on Human Factors in Computing Systems

PEER REVIEWER - LATE BREAKING WORK TRACK

Virtual

2021

Voluntary Work

University of Auckland

- Industry Guide at the *Exhibition Day 2019* of Faculty of Engineering
- Workshop Assistant Software Engineering workshop at *Ingenuity Day 2019* (Women in Engineering)
- Volunteer at *Newmarket Community Affairs* of Newmarket Campus

Public Voluntary Work

- Volunteer at Galle Literary Festival, Sri Lanka in 2016
- Volunteer at Galle Children's Festival, Sri Lanka in 2014 and 2015
- Volunteer at Social Integration Week, Sri Lanka in 2014
- Team Leader at World Space Week-Sri Lanka in 2014
- Volunteer at Commonwealth Youth Unite in 2013

Memberships

- IEEE (Graduate Student Member)
- IEEE Computer Society
- IEEE Young Professionals
- IEEE Women in Engineering

References

Available upon request.