

Faith Culas

New Zealand | fcul804@aucklanduni.ac.nz | linkedin.com/in/faith-culas | github.com/fcul804

I am a software engineering researcher in my early career of research. I bring expertise from the industry into research to improve software engineering. I enjoy programming, building and designing software systems. My interest lies in cognitive diversity and making software development tools and practices more inclusive.

Education

University of Auckland, New Zealand, PhD in Software Engineering Feb 2024 – present

University of Moratuwa, Sri Lanka, BSc(Hons) in Electronics and Telecommunications Engineering Jan 2017 – Jun 2021

- GPA: 3.71/4.2 - First Class
- Dean's List (Honorable mention for CGPA above 3.80): 5 semesters out of 8
- **Notable modules:** Applied Statistics , Data Structures and Algorithms, Computer Networks, Telecommunication Core Networks

Experience

Research Assistant, University of Auckland – New Zealand Apr 2024 – Jun 2024

- Part of the Veracity Project with involvement in interviewing software practitioners and coding the interviews

Advanced Application Developer, NTT Data – Singapore Oct 2022 – Oct 2023

- Part of the development team at Development Bank of Singapore (DBS) in the Treasury and Markets department
- Developed TDMS, a document management system for trading for corporate customers from four countries. This was optimised to process trade documents from minutes to a few seconds
- Developed a dashboard on Kibana to display daily jobs and send alerts using structured arguments in elk.
- Part of the development team of Hi-P, a hyper personalization platform to give customers custom rates for foreign exchange rate

Software Engineer, ZeroBeta – Sri Lanka Aug 2022 – Sep 2022

- Automated cloud resource allocation scripts through AWS Cloud Formation
- Developed a library to store and retrieve secrets from AWS Secrets Manager

Software Engineer, Axiata Digital Labs – Sri Lanka Jun 2021 – Aug 2022

- Developed Google MDP – An application for 15 million telecom users to view their purchased plans and purchase new plans in their android devices. This solution is integrated with Google's Mobile Data Plan Sharing API.
- Developed a Notification system for 1.4 million postpaid customers using Java and Spring Boot. Unit test written with more than 80% coverage and Load testing done using JMeter

Software Engineer Intern, Axiata Digital Labs – Sri Lanka Jun 2019 – Dec 2019

- Developed a web application to register SIMs online using AWS Rekognition and Google vision OCR

Projects

Real Time Activity Recognition and User Authentication using passive Wi-Fi Mar 2020 - Jun 2021

- A real time system to authenticate a single user together with activity recognition and localization within a room using Wi-Fi signals. Software Defined Radios were used to collect data. *Technologies Used: Python , GNU Radio*

Real Time Attendance Tracker for institutions Oct 2020 - Dec 2020

- With the outbreak of COVID19, SNAPIT was developed to enable users to track their travelling by tapping their phone on an NFC enabled device at every institution. *Technologies Used: React Native, MySQL*