# **NAVEEN S. KULARATNE**

# Software Engineer

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#### **EDUCATION**

University of Passau
Master of Science in Computer Science
2018 – 2023

Asia Pacific University

Bachelor of Science in Software Engineering

2014 – 2017

# **WORK EXPERIENCE**

# Thousand Japan Tokyo, Japan Internship Sep 2017 – Dec 2017

- Crafted web applications and iOS interfaces with a keen eye for design and practical functionality. Created striking banners and
  webpages, adhering to iOS design principles to ensure platform maturity and optimal user experience. Conceptualized and designed the
  screenshot layout for the Fukroo application, enhancing its visibility and appeal on the App Store.
- Applied responsive design principles to create websites that are visually appealing and accessible on all platforms.
- Revitalized the company's web presence by enhancing website structure: Optimized page layouts for consistent user experience, eliminated superfluous alignments to improve readability, and meticulously proofread typography to ensure professional content presentation.

#### **PROJECTS**

#### Master Thesis (GitHub)

Automated labeling of plain-text privacy policies via machine learning by analysis of labeling strings for DPV mapping. Python, Tensorflow, Scikit-learn, NumPy, Matplotlib

- Developed and implemented advanced natural language processing (NLP) algorithms for automatic, high-precision analysis of text-based privacy policy statements.
- Developed and optimized machine learning and deep learning models, including SVM, RF, LR, K-NN, LSTM, CNN, and hybrid model (CNN-LSTM), to analyze a comprehensive labeled dataset of privacy policy statements. Trained the ML and DL models on a labeled corpus of a privacy policy statement and used the predictions to create a GDPR-compliant privacy term.
- Leveraging the power of DL models, the project resulted in a remarkable 22.22% improvement in recall and a 10.71% uplift in the F1 score. In contrast, the ML models achieved a significant 62.07% enhancement in precision scores.

## Bachelor Thesis (GitHub)

Web-based Medical Consultation System

Node.js, Express.js, MongoDB, HTML/CSS

- Developed a web app connecting medical professionals and remote patients, enabling real-time online consultations and transforming healthcare access.
- Engineered a scalable and efficient RESTful API and utilized the Model-View-Controller (MVC) architectural pattern to streamline data handling and business logic. Leveraged Node.js and Express.js to deliver robust CRUD operations, ensuring a maintainable and organized codebase.
- The system is equipped with intuitive user control settings, streamlining the process of scheduling appointments and fostering
  post-consultation communication through an intuitive commenting feature.

## Inspect-Ricals (GitHub)

Electrical installation and inspection management system (EIIMS)

Java, Oracle DB

- Engineered a Java desktop application for an electrical company specializing in advanced wiring and installation services.
- Implemented an Oracle database to manage customer and user data securely. The database design was carefully crafted to optimize data storage, ensuring efficient querying and data retrieval.
- Driving operational efficiency, the application organizes the management of inspection processes. It also harnesses the power of data
  analytics to generate insightful reports, empowering both management and clients with critical business intelligence.

## **SKILLS**

Programming Languages – Python, Javascript/Node.js, SQL, Bash

Web Development – Express, HTML5/CSS3

Databases – MySQL, MongoDB, Oracle DB

Data Science/ML – Tensorflow, Scikit-learn, Scikit-Multilearn, NLTK, Gensim, Pandas, NumPy, Matplotlib, Jupyter

Other Technologies – Google Cloud Platform, Selenium, Postman, Git, Looker Studio

Languages – English (Fluent), Japanese (Proficient), Sinhala (Fluent), German (Beginner)