

in @karikaranvett

@karikaranvetti

@karikaran

karikaranvetti@gmail.com

A.P.C road, ∨antharumooli, Batticaloa, Sri Lanka.

+94778477953

## **SKILLS SUMMARY**

Programming Languages
Python, C, C++, Java,
JavaScript, Node JS,

**Frameworks** 

Django, Django Rest, Express JS,React JS, Next Js

Database System
MongoDB, MySQL

IOT

Arduino, Raspberry Pi Numerical Computing

MATLAB. Octave

**Cloud Computing** 

Heroku, AWS

Version control

Git. GitHub

**Operating Systems** 

Linux, Windows

Circuit Design

Proteus

**Other Skills** 

Agile Development Methods
Software Best Practices

## **CERTIFICATIONS**

- AWS Fundamentals: Going Cloud-Native | Coursera
- Web Application Technologies and Django | Coursera
- Python | HackerRank
- Neural Networks and Deep Learning | Coursera
- Machine Learning by Stanford University | Coursera - Ongoing
- Project Management: The Basics for Success | Coursera

# KARIKARAN VETTIVEL

## COMPUTER ENGINEERING UNDERGRADUATE

# **PERSONAL PROFILE**

Recent graduate with 5 months of experience as a full-stack software engineer and 6 months as a computer engineering intern. Skilled in Node.js, React.js, C++, and MongoDB with a passion for delivering high-quality and efficient software solutions. experience in software development methodologies and problem-solving skills. Seeking to leverage my skills and experience as a software engineer in a full-time role.

## **WORK EXPERIENCE**

# **Full Stack Engineer**

SPADES | June 2022 - Nov 2022

- Contributed to the design and development of a custom restaurant payment system utilizing Node.js, Next.js, and MongoDB while implementing microservices architecture.
- · worked in a cross-functional team and completed tasks in agile sprints.
- Provided customer support and root cause analysis to improve the payment system by addressing and resolving customer-reported issues.

# **Computer Engineering Intern**

Paragum technologies | Jan 2022 - June 2022

- Developed software programs for network devices using C++ and Node.js, with a focus on performance optimization.
- Utilized Node add-ons and C++ integration for efficient data processing and improved performance of real-time large data sets.

## **EDUCATIONAL HISTORY**

# BSc. in Computer Engineering | Nov 2017 Present

University Of Peradeniya | Current GPA: 3.35/4.00

## **PROJECTS**

# **Enhancement of the Efficiency of Vehicular Communication**

Using SDN Aug 2021 - On going

Research focused on using software-defined networking (SDN) to enhance vehicular communication and improve the scalability and reliability of Vehicular Ad-hoc Networks for improved mobility. GitHub

## Smart Vending Machine June 2020

Developed a web application with real-time transactions which allows purchasing products. the vending machine is controlled by a cloud-based system to make sure of live transactions. <u>GitHub Repo</u>

Contribution: Backend development, Web API

Technologies: Django, HTML, AWS, JavaScript, Python, Django Rest

Eshop Aug 2021

The app was designed in a way to sell and buy almost everything among university students. It shows the seller's contact number and can contact through app directly via messaging option. <u>GitHub Repo</u>

Contribution: Backend development, Web API, Database management Technologies: Node Js, AWS, JavaScript, Express JS, MongoDB, Flutter

## Car Rental Platform May 2020

Users can host/rent their vehicle on this platform & users in need of vehicles can search & book the vehicles for the travel. <u>GitHub Repo</u>

Contribution: Database connectivity, hosting Technologies: PHP, HTML,CSS, AWS,MySQL

#### AWARDS AND ACHEIVEMENTS

- LKNOG Conference 2022
   Presented influential final year research at Srilankan network operators group conference.
- IEEE Innovation Nation Srilanka 2021 Participation

Selected to top 100 teams out of 1350 tems

- Rising Rotaractor Of the year 2019
   Rotaract Club of University of Peradeniya
- ACES Hackathon Participation 2019
  Selected to top 10 teams
- DEEP SPEED SEMIFINALISTS 2018
   Line following robot competition
   Top 5 out of 80 teams
   participated.
- ACES Coders V8.0 Participation
   12-hour algorithmic coding
   nationwide competition

#### **INTERESTS**

- Web Development
- Communication Networks
- Machine Learning
- IOT

#### PERSONAL SKILLS

- Decision Making
- Critical & Analytical Thinking
- Team player
- Leader Ship
- Fast learner
- Innovative Thinking
- Management

## **REFERENCE**

Prof. Roshan G. Ragel
Professor
Dept. of Computer Engineering
Faculty of Engineering
University of Peradeniya
Email: roshanr@eng.pdn.ac.lk
mobile: +94773857755

Dr. Asitha Bandaranayake
Senior Lecturer
Dept. of Computer Engineering
Faculty of Engineering
University of Peradeniya
Email: asithab@eng.pdn.ac.lk
mobile: +94715 117771

#### Institute Management and Makerting Platform Dec 2020

developed a web app that manages institute staff details and markets their services. all the content on this site is dynamic data. <u>GitHub Repo</u> Technologies: Django, PostgreSQL, JavaScript, HTML, CSS, Heroku

# Liver Patient Identification System Aug 2021

developed a machine learning model to identify a patient with liver disease by analyzing given medical information ( ALT, AST, bilirubin, etc) by the user. <u>GitHub Repo</u>

Contribution: Data preprocessing, building models using different algorithms

Technologies: Python scikit-learn

## Fuzzy Logic Recommendation System Sept 2021

Created an FYP recommendation system using fuzzy logic to help students find the most suitable research area based on their skills and interests. <u>GitHub Repo</u>

Technologies: MATLAB Fuzzy Logic Toolbox

## 8-bit single cycle Processor Implementation Mar 2020

An ARM architecture based processor was implemented with ALU, register file, control unit, data memory, data cache, instruction memory, and instruction cache. *GitHub Repo* 

Technologies: Verilog HDL, GTKWave

# **MINI PROJECTS**

## Auction Server in Java Jun 2020

Multi-threaded socket server for stock auctions using JAVA. <u>GitHub</u> Technologies: Threads, Synchronization primitives, Sockets, OOP

## A Simple Search Engine Using Python Nov 2020

Created a script enabling users to search and view relevant pages from a website through the terminal. <u>GitHub</u>

Technologies: Python Requests, Beautiful Soup

#### Fractal Visualizer May 2020

Multi-threaded application for Fractal Visualization using JAVA. Github

#### Calendar Event Scheduling System Mar 2021

Calendar events scheduling stand alone software. <u>GitHub</u> Technologies: Python

Simple Computer System (ALU) Aug 2019

Gate Level design and implementation of a simple ALU

## **EXTRA CURRICULAR ACTIVITIES**

**Department Coordinator** - IET On Campus, University of Peradeniya **Project Chairperson** - Rotaract Club of University of Peradeniya **Member** - ACES, University of Peradeniya