

ARUNA NUWANTHA

COMPUTER ENGINEERING GRADUATE
FACULTY OF ENGINEERING UNIVERSITY OF PERADENIYA

 arunanuwanthablan97@gmail.com |  @ArunaNuwantha  @github.com/Aruna  +94 712 990 123

 hackerrank.com/ArunaNuwantha

INTERESTS

- Software Development
- Full-stack Development
- Mobile App Development
- Computer Networking

PROFILE

A fresh graduate ready to learn new things on demand. Believe in teamwork, and respect leadership. I like to be a free thinker and innovative. Adaptive to different situations and people. Hope to do better at what I am good at.

EDUCATION

University of Peradeniya 2017- present
B.Sc. Engineering (Hons.)
Specialized in Computer Engineering
CGPA: 3.5/4.0

Saranath College 2008-2016
G.C.E Advanced Level Examination
Z score - 1.8403
G.C.E Ordinary Level Examination - 9As

EXPERIENCE

R&D ENGINEER INTERN

Synopsys (PVT LTD) | 2022

- Worked on the ZEBU emulator verification group.
- Involved with three major projects (ACA dashboard, Jira Tracking dashboard, and Code Ownership Tool)
- **Technologies:** Python, PHP, Javascript, MySQL, Bash, Csh, PerForce

ACHIEVEMENTS

Synopsys Code Engine contest 2022
Second runner up (from 200+ competitors)

Google Code Jam Round 2 2021
world rank: 3996 (from 90000+ competitors)

Google Hash Code Round 1 2021
world rank: 5563 | country rank: 11
(from 125000+ teams)

ACES Coders v8.0 - UoP
country rank: 21 (200+ Teams)

94DEV Coding Competition 2021
country rank: 4 | competitive programming

PROJECTS

SMART PILL MANAGER 2021

Make a device and website to inform you when to take medicines and which number of pills you need to take at that time.

Contribution: Developed the REST API and Frontend and deployed them to the Azure cloud.

Technologies: React, Node.js, MongoDB, Arduino, Python
Techniques: MQTT, Fingerprint Authentication, JWT, Cloud Computing

CONFIGURABLE ECU EMULATOR ONGOING

Build a Configurable Electronic Control Unit Emulator for digital twins in the automobile industry.

Contribution: Research and Development

Technologies: C/C++

HOSPITAL MANAGEMENT SYSTEM 2020

Web application and Native mobile application with a Database management system.

Contribution: Developed the backend and relational database of the website.

Technologies: HTML, CSS, MySQL, PHP, Flutter, Dart

CPU IMPLEMENTATION 2020

Implemented 8-bit ALU with memory management that can execute a binary code with given Instruction Set Architecture such as add, sub, and, or, j, loadi, beq, etc.

Contribution: Designing the data path, Implementation of the processor

Technologies: Verilog HDL

Finalist - Hackthon UoP 2019

project: Dating website for pets

DEEP SPEED Competition 2018

Second Runner Up of 60 teams from the DEEP SPEED Robotic competition by Electrical Engineering Department ,University Peradeniya.

TECHNICAL SKILLS

Programming Languages: JavaScript, C, C++, Java, Python, Dart, PHP

Web Development: React, Express, HTML, CSS, Node.Js, Next.Js

Databases: MYSQL, MongoDB

Mobile Development: Flutter, React-Native, Android studio

Cloud Computing: Azure, AWS, Heroku

Operating Systems: Linux, Windows

Version Control: Git, PerForce

EXTRA-CURRICULAR ACTIVITIES

Committee Member 2022

Organizing committee of ACES Coders v9.0

Committee Member 2019

Knowledge without Borders Society
University of Peradeniya

Active Member 2019-present

Aces organization | University of Peradeniya

Active Member 2019-present

Hackers club | University of Peradeniya

Committee Member 2018

Gavel club | University of Peradeniya

DATING SITE FOR PETS

2020

Online dating Web Application which can include pet details for hackathon competition.

Contribution: Frontend Implementation

Technologies: React, Firebase

MINI PROJECTS

Auction Server: Implemented a sample server that can be used by clients to bid for items in a stock exchange. .

- **Techniques:** Java, Threads, Synchronization primitives, Sockets, OOP, and Collections

Mind Relaxing Game: Implemented Light Pattern Identifier game using Arduino.

- **Technologies:** MATLAB, Arduino

Card Reader: Implemented mobile app to recognize the scratch card numbers

- **Technologies:** Flutter, Firebase ML Text recognizer

Bike Renting System: train a Machine Learning model so that we will be able to predict the number of bicycles needed each day.

- **Technologies:** Python, Numpy, Pandas, Regression ML Model

PathFinder: Line following robot using basic electronic components

CERTIFICATIONS

- **Microsoft certified Microsoft Azure Fundamentals** 2021
Issuer: Microsoft corporation
- **Flutter Development Bootcamp with Dart** 2021
Issuer: Udemy
- **Data Scientist program** 2021
Issuer: Data insight
- **Cisco certified Programming Essentials in Python** 2021
Issuer: Cisco Networking Academy
- **Arduino Platform and C Programming** 2020
Issuer: University of California, Irvine | Coursera
- **Data Structures and Algorithms Specialization** 2020
Issuer: UC San Diego | Coursera

REFERENCES

DR. ISURU NAWINNE

Senior Lecturer

Faculty of Engineering,
University of Peradeniya.

Email: isurunawinne@eng.pdn.ac.lk

Tel No: +94 718 495 506

DR. ASITHA BANDARANAYAKE

Senior Lecturer

Faculty of Engineering
University of Peradeniya

Email: asithab@eng.pdn.ac.lk

Tel No: +94 715 117 771