

Damsy De Silva

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[GitHub](#) | [LinkedIn](#) | [Portfolio](#)

A 3rd year computer engineering undergraduate with over two years of development experience in Java and a strong interest in software engineering. A quick learner with interests in hardware programming, artificial intelligence, web and software development and a passion for research, currently seeking opportunities as a research intern or trainee in the IT industry.

PROGRAMMING SKILLS HIGHLIGHTS

Programming Languages	Java, C, C++, Python, MATLAB	Database Systems	MySQL
Mobile Programming	Android Native, Flutter/Dart	Procedural Programming	ARM Assembly
Web Developing	HTML, CSS, JavaScript, ReactJS	Hardware Programming	Arduino C, Verilog HDL

EDUCATION

BSc Engineering (Hons) | Faculty of Engineering | University of Peradeniya, Sri Lanka **Nov 2017 - Present**

Current GPA : 3.70 / 4.00

Specialization : Computer Engineering

Relevant Coursework : Computer Architecture, Embedded Systems, Software Construction, Computer and Network Security, Database Management, Data Structures & Algorithms, Discrete Mathematics, Numerical Mathematics

Prajapathi Gothami Girls' College | Ambalangoda, Sri Lanka

2003 - 2016

GCE Advanced Level Examination (2016) : Combined Mathematics: (A), Chemistry: (A), Physics: (B)

National Rank : 1122 Z-Score : 1.8444

PROJECTS ([View on GitHub](#))

Project chessMATE | Smart Chess Platform | Group Project

2020 - 2021

A IoT chess Platform that allows worldwide distant chess players to connect and play on a physical chess board powered electronically and controlled through a mobile app. The system allows viewing and streaming of live games, and chess tutorials in addition to playing online.

Technologies : Flutter-Dart, MySQL, NodeJS, AWS, C++, Autodesk Fusion360, ESP32

Techniques : Multiplexing algorithms, Bluetooth-serial, Web-socket programming, Embedded systems

Contribution : Mobile app development, Back-end development, Hardware programming, AWS Cloud deployment

National COVID Management System | Individual project

2021

A full-stack web application to efficiently manage patients having COVID-19 symptoms with bed reservation and queue controlling mechanisms. The system also provides country, district, and hospital level patient statistics.

Technologies : Java, ReactJS, MySQL, Maven

RISC-V 32-bit (RV32IM) Pipelined Processor Implementation | Group Project

2021 - Present

Implementing a pipelined processor and assembler based on the RISC-V instruction set Architecture. Processor includes ALU, register file, control logic, forwarding unit, data memory, data cache, instruction memory and instruction cache.

Technologies : Verilog HDL, C

Techniques : RISC-V ISA, Computer Architecture

Crossword Puzzle Game | Group Project

2021

A Facebook instant game for school children so that they can select and solve educational crossword puzzles.

Technologies : ReactJS

Contribution : User Interface Developing, User-Experience Enhancing, Crossword Content Designing

Library Management System | Group Project

2020

Web application with database for library management system for an educational institute in order to make library management more efficient and easier to handle.

Technologies : MySQL, HTML, CSS, PHP

Contribution : Database modelling, front-end developing

Auction Server | Group Project

2019

A Server which can be used by clients to bid for items in a sample stock exchange.

Technologies : Java

Techniques : Multi-threading, Synchronization Primitives, Socket Programming, OOP

Contribution : Back-End Implementation, Interface Designing

Project You See World | Smart Guidance System for Visually Impaired Persons | Group Project 2018-2019

Developed an electronically powered blind stick that detects near obstacles and vibration belt to notify the blind person. And a mobile app for assistance with voice controlling.

Technologies: Arduino Microcontroller, Raspberry Pi, Ultrasonic Sensors

COMPETITIONS & AWARDS

Arimac Future Cast Ideathon 2021 IoT Category	2021
<i>Finalist from over 50 teams and over 150 participants for project chessMATE (Smart Chess Platform)</i>	
HackStat 2.0 2019 Organized by Stat Circle, University of Colombo	2019
<i>2nd runner-up from over 50 teams in creating a prediction model for an insurance-based dataset.</i>	
DATATHON SLIIT CODEFEST Merit Award at Finals	2019
<i>Merit Award at finals from over 100 teams in creating a prediction model on a dataset which is based on online shoppers' purchasing.</i>	
IEEE SS12 ASIA 2018 Innovative Pilot Competition, University of Peradeniya Runners-up	2018
<i>Runners-up for project "You See world", a smart guidance system for visually impaired persons.</i>	
IEEE Region 10 Humanitarian Technology Conference 2018 Community Outreach Project	2018
<i>Runners-up at the "Humanitarian Product Competition" for the project "You See world".</i>	
Most Outstanding Student Award Post A/L School Prize Giving	2017

CERTIFICATIONS & COURSES

Cisco Certified Network Associate (CCNA v7) SLIIT Kandy Sri Lanka	2019 - Present
SPARK X Professional Development Program Spark Academy, Sri Lanka	Mar 2021 - Sep 2021
Google IT Automation with Python Professional Certificate COURSERA	2021
AWS Fundamentals: Going Cloud-Native Amazon Web Services COURSERA	2020
Neural Networks and Deep Learning deeplearning.ai COURSERA	2020
Diploma in Information Technology ESOF METRO CAMPUS Sri Lanka	2017

TEACHING EXPERIENCE

Teaching Assistant Department of Computer Engineering University of Peradeniya	2021 - Present
CO321: Embedded Systems for 3 rd year computer and mechatronic engineering undergraduates	
Conducting weekly 3-hour lab sessions with lab task evaluations and online quiz invigilation	
CO227: Computer Engineering Project	
Mentoring 3 rd year students for the 3 rd year project	

EXTRACURRICULAR ACTIVITIES

Deputy Head Prefect Prajapathi Gothami Girls' College, Ambalangoda	2016
School Chess Team Captain: U-16, U-14 Team Member	2005 - 2015
<i>Have won National Level chess Championships since 2005</i>	
School Badminton Team Team Member	2004 - 2014
<i>Have won badminton Championships since 2004</i>	
School Math Quiz Team Team Member	2008 - 2015
<i>Have won Inter-school Math Competitions since 2009</i>	

REFERENCES

Prof. Roshan Ragel
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