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

SPARK X Professional Development Program | Spark Academy, Sri Lanka   *Mar 2021 – Sep 2021*

A 6-month industry readiness program for software engineering undergraduates covering technical modules with developing and deploying real-world applications, and soft skills. Received a full-scholarship from Spark Academy during the selection process.

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*

Finalist from over 50 teams and over 150 participants for project chessMATE (Smart Chess Platform)

HackStat 2.0 2019 | Organized by Stat Circle, University of Colombo   *2019*

2nd runner-up from over 50 teams in creating a prediction model for an insurance-based dataset.

DATATHON | SLIIT CODEFEST | Merit Award at Finals   *2019*

Merit Award at finals from over 100 teams in creating a prediction model on a dataset which is based on online shoppers' purchasing.

IEEE SS12 ASIA 2018 | Innovative Pilot Competition, University of Peradeniya | Runners-up   *2018*

Runners-up for project "You See world", a smart guidance system for visually impaired persons.

IEEE Region 10 Humanitarian Technology Conference 2018 Community Outreach Project   *2018*

Runners-up at the "Humanitarian Product Competition" for the project "You See world".

Most Outstanding Student Award | Post A/L School Prize Giving   *2017*

CERTIFICATIONS

Cisco Certified Network Associate (CCNA v7) | SLIIT Kandy | Sri Lanka   *2019 – Present*

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 | ESOFT METRO CAMPUS | Sri Lanka   *2017*

TEACHING EXPERIENCE

Teaching Assistant | Department of Computer Engineering | University of Peradeniya   *2021 – Present*

CO321: Embedded Systems for 3rd year computer and mechatronic engineering undergraduates
    Conducting weekly 3-hour lab sessions with lab task evaluations and online quiz invigilation
CO335: Cyber Physical Systems Project
    Mentoring 3rd year students for the 3rd 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*

Have won National Level chess Championships since 2005

School Badminton Team | Team Member   *2004 - 2014*

Have won badminton Championships since 2004

School Math Quiz Team | Team Member   *2008 - 2015*

Have won Inter-school Math Competitions since 2009

REFERENCES

Prof. Roshan Ragel
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