

# K. D. SUNERA AVINASH CHANDRASIRI

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### **PROFILE**

A third-year computer science undergraduate who has a passion for algorithms and problem-solving. I am also interested in web technologies and mobile app development. A GNU/Linux Enthusiast.

Portfolio: https://kdsuneraavinash.me

Github profile: https://github.com/kdsuneraavinash

in LinkedIn profile: https://www.linkedin.com/in/kdsuneraavinash

# **EDUCATION**

### University of Moratuwa

Undergraduate, Bsc (Computer Science and Engineering)

Dean's List - Semester 1, 2, 3

### Kalutara Vidyalaya - National School

GCE Advanced Level Examination

All A Passes in Physical Sciences stream (Island rank 76<sup>th</sup>, District Rank 2<sup>nd</sup>)

Building Cloud Services with the Java Spring Framework

Building Scalable Java Microservices with Spring Boot and Spring Cloud

RESTful API with HTTP and JavaScript

Networking Essentials Course

Introduction to Packet Tracer

July 2013 - June 2017

September 2017 - Present

Current SGPA: 4.08/4.2

Z-Score: 2.680

Course ra

Coursera Coursera

Coursera Cisco

Cisco

# **TECHNICAL STRENGTHS**

♦ Programming Languages

☐ Frameworks & Technologies

Web Development

Databases

Java, Python, Dart, JavaScript, Golang, C++, PHP

Flutter, React, Express, Arduino, OpenCV

HTML5, CSS, Bootstrap, WordPress

PostgreSql, MySql, Firebase Firestore

#### **COMPETITION AWARDS**

### IEEExtreme 12.0 & 13.0 (IEEE) — Top 100 (global)

October 2018 & 2019

A 24-hour international competitive programming competition organized by IEEE and attended by more than 4000 teams.

### ACES Coders v8.0 (University of Peradeniya) — Winners

February 2020

A 12-hour competitive programming competition organized by the Association of Computer Engineering Students of the Department of Computer Engineering, the University of Peradeniya.

### HackX 2019 (University of Kelaniya) — Winners

September 2019

An innovative startup challenge conducted by the Management and IT faculty of the University of Kelaniya in which our team developed an Android/iOS mobile app named 'Teleport' to facilitate ride-sharing for parcel delivery.

# 14<sup>th</sup> YCS Competition (Ministry of Education & FITIS) — Winner

August 2015

An island-wide software development competition organized by the Ministry of Education in which my solution was a learning management system designed to teach students who have negligible knowledge about mathematics.

### XOBot '19 (IESL & University of Jaffna) — Runners Up

October 2019

A robotic manipulator design competition conducted as part of the Techno exhibition '19 in which the task was to design a Tic-Tac-Toe playing robotic arm.

UOJ Coders v1.0 (University of Jaffna) — Winners	March~2019
IESL RoboGames '18 (IESL & University of Moratuwa) — Winners	October 2018
IDEA Challenge (University of Moratuwa) — Runners Up	October 2018
Reakhack 2.0 (University of Kelaniya) — Runners Up	$November\ 2019$
SLRC '17 (University of Moratuwa) — Second Runners Up	January 2018
Hash Code 2019 (Google) — Sri Lankan First Place & 260 <sup>th</sup> globally	February 2019

# **HONOURS & AWARDS (OTHER)**

### Hiran Chathura Kulasekara Throphy

2016

Award for best performing student in Physical Science Stream, Kalutara Vidyalaya - National School.

National School Software Championship (Ministry of Education) — Merit	2015
ICT Competition (Ministry of Education) — Western Province 1 <sup>st</sup> place	2013
Science Competition (Ministry of Education) — Western Province 2 <sup>nd</sup> place	2010
Social Science Competition (Ministry of Education) — All Island 5 <sup>th</sup> place	2010

### **PROJECTS**

# Theme Provider — Open source plugin

June 2019

https://pub.dev/packages/theme\_provider

A dependency injection plugin written in *Dart (for Flutter)* to automatically rebuild UI on theme changes. This package attempts to reduce boilerplate code when adding theme switching functionality to flutter while providing theme persistency and support for dark themes out of the box.

### Googong Smart city Community app

April 2020 - Ongoing

https://play.google.com/store/apps/details?id=au.com.onewifi.googongIotApp

A smart city app which allows users to find local community services, receive public announcements of events and upload public amenity faults supported by the smart city network in Googong, Australia. This was a cross-platform mobile application and a web application developed using *Django and Flutter*.

### CB3D Website — 3D Printing Portal

May 2020 - August 2020

https://cb3d.circuitbreakerssl.com

3D printer website and administration portal with online order management and 3D file preview functionalities. *Node.js, Express.js, React and PostgreSql* were used to develop the system.

### Rise of the Pharaohs Scavenger hunt app

October 2019 - February 2020

https://github.com/kdsuneraavinash/cse-night-app

Scavenger-hunt mobile app developed using *Flutter and Firebase* which was created as the invitation for the CSE event – Rise of the Pharaohs.

#### Tic-Tac-Toe Playing Robot Arm — Mobile app integrated robot

October 2019

https://youtu.be/7ki3itajGDc

This was a vision-based approach to developing a tic-tac-toe playing robot using *Arduino*, *Android*, and *OpenCV*. The robot operates via the help of an attached mobile phone which identifies the board configuration and calculates the next move by applying the minimax algorithm.

# OIS, Inventory Management System — $5^{\rm th}$ Semester Project

February 2020 - June 2020

https://github.com/openinventoryorg

Automated inventory management system for computer labs with role-based access system. The system consisted of a mobile application and a web application. The web frontend was developed using React, Backend using Node.js/Express and mobile application using Flutter.

## Java based RPAL Interpreter

June 2020

https://github.com/kdsuneraavinash/rpal-ast-interpreter

Interpreter implemented in Java which evaluates abstract syntax trees according to the RPAL language grammar specification. Developed as part of the CS3152 Programming Languages module.