# **INOJ AKALANKA**

**\** +94-779-037-738

Rathgama, Galle, Sri Lanka

% Portfolio

## **EDUCATION**

## University of Moratuwa

## BSc (Hons) in Engineering

Mov 2016 - Jul 2021

- ♥ Katubedda, SL
- Biomedical Engineering Major GPA: 3.54/4.2 (Second Upper)
- 4 years full time degree

### Richmond College

#### **G.C.E Advanced Level**

math Aug 2013 - Aug 2015

Galle, SL

- Studied in Physical Science Stream
- Combined Mathematics (A), Chemistry (A), Physics (B)
- National Rank: 336, District Rank: 39, Z-Score: 2.2557

### **EXPERIENCE**

## Research and Development Engineer II Synopsys Lanka (Pvt) Ltd

🛗 June 2021 - Present

♥ Colombo, SL

- Working as a memeber of ZeBu Engineering Operations and Analytics team
- Part of few projects which deal with quality/performance aspect of the product
- Aid internal customers to be effective and efficient with their work

### **Engineering Internship**

### LE Robotics (Pvt) Ltd

## July 2019 - Dec 2019

- Minuwangoda, SL
- Researched to enhance existing object detection algorithm using ARM Assembly language
- Designed a customized Printed Circuit Board (PCB) for a Torque Sensor
- Implemented an C-Sharp application to calibrate a camera automatically before it is used for object detection

## **TECHNICAL SKILLS**

Python	Shell scripting	ng HTML	. PHP	CSS	JS
SQLite	Verilog C	C-Sharp	Unity	Blender	
OrCad	Solidworks	Scilab	CentOS	MS Office	

## **LANGUAGES**

English Sinhala



## CAREER OBJECTIVE

 To pursue a career in different engineering fields and be a part of a research team which tries to invent novel technology that will be beneficial for human race and environment in an effective way.

### **INTERESTS**

- Programming
- Web Development
- Digital IC Designing (Verilog)
- Virtual Reality and Game Development
- Bioinformatics
- Robotics in Medicine and other Engineering Fields

### **PROJECTS**

#### Tests Bulk Breakage Identifier and Analyzer

- Used python to scan through logs dumped by test suit runs to identify bulk breakages and then used SQLite to dump useful information grepped in to a database.
- Used HTML, PHP and CSS to visualize the useful data from the database as tables and graphs for management purposes.

#### Measurement of Presence in VR

- Apply VR development, 3D modeling, bio signals and statistical knowledge in order to research for a measurement to quantify presence (someone's engagement) in Virtual Reality.
- Taking part in 3D modeling VR Objects in Blender, designing questionnaire in Unity for VR etc.

### YOLO optimization using ARM Assembly

- Applied ARM architectural, microprocessor and C programming knowledge in order to optimize You Only Look Once (YOLO) real-time object detection algorithm so that it can be efficiently run on Raspberry Pi 3B+.
- Studied ARM ISA in order to find assembly level instructions so that mathematical calculations can be optimized using parallel computations and findings were presented to team members using PowerPoint.

## **HOBBIES**

Blogging Videography Hiking

Exploring Swimming Life-Saving

Volunteering