



PUBUDU PREMATHILAKA

COMPUTER ENGINEER

No 20, Old Kandy road, Gurudeniya, Kandy, Sri Lanka

☎ (+94) 9207825 | ✉ pubuduudara7@gmail.com | 📱 pubuduudara | 🌐 pubuduudara/

INTERESTS

Algorithmic Programming
Machine Intelligence & Computer Vision
Networking & Cloud Computing
Numerical Computing
Robotics

Education

University of Peradeniya, Bachelor of Science in Computer Engineering	CGPA : 3.64/4	2016 - Ongoing	Sri Lanka
Dharmaraja College, G.C.E. Advanced Level Examination		2001 - 2014	Sri Lanka

Awards

2018	4th Team Ranking in Aces Coders v7.0 , National level inter University algorithmic programming competition organized by the Faculty of Engineering University of Peradeniya. Team JPAC	Coding
2018	First Runner-up in Pre Coders v7.0 , Intra University competitive Programming competition hosted by Faculty of Engineering University of Peradeniya. Team JPAC	Coding
2018	44th County Rank in IEEEExtreme 12.0 , Global 24hr Competitive Programming contest. Team JPAC	Coding
2020	Second Runner-up in Pre Coders v8.0 , Intra University competitive Programming competition hosted by Faculty of Engineering University of Peradeniya. Team JPAC	Coding
2019	1st Runner-up in Pre-Xtreme , Intra University algorithmic programming competition organized by the Dpt of Computer Engineering University of Peradeniya to select top three coding teams in the department and award them IEEE membership to compete in IEEEExtreme 13.0 . Team JPAC	Coding
2019	27th County Rank in IEEEExtreme 13.0 , Global 24hr Competitive Programming contest. Team JPAC	Coding
2019	Winners of Medical and Healthcare Category in ACES Hackathon 2019 , Intra University Hackathon. Project: tinyPod	Development
2017	Winners in Dialog App Challenge Launched by Dialog Axiata , National level inter University app challenge	Development
2018	Most Popular idea in Aces Hackathon , Intra University Hackathon. Project: Data Over Sound	Development
2018	6th Place in Xbotix Robotics Competition , Competitive Robotics competition hosted by Faculty of Engineering University of Ruhuna Sri Lanka. Robot Minotaur qualified to the final round among 35 teams in University category.	Robotics
2018	SLRC (Sri lankan Robotics Challenge) , Qualified to the top 10 final teams in SLRC hosted by University of Moratuwa Sri Lanka.	Robotics
2017	SLRC (Sri lankan Robotics Challenge) , Successful participation	Robotics
2015	GCE Advanced level examination , Physics A, Chemistry A, Mathematics A z score 2.16, National rank 714, District rank 47	Examinations
2011	GCE Ordinary level examination , 8A's and B for English Literature	Examinations

Skills

Programming Languages	Python, Java, C, JavaScript
Numerical Computing Packages	MATLAB, Octave, Numpy
Hardware Programming	Verilog HDL, Arduino C
Procedural Programming	ARM Assembly
Computational Mathematics	Numerical mathematics, Discrete mathematics Statistics and Probability, Machine learning
Micro-controllers	Arduino
Operating Systems	Linux (Bash shell), Windows
Documentations	Latex, Libre Office, Microsoft Office
Version control	github
Languages	English, Sinhala
Web	HTML, CSS, PHP, JavaScript
Graphics	Adobe Illustrator, Adobe Photoshop, Adobe Animate

Projects

Novel Finite Element Based Structural Analysis Algorithm Improvement

University of Peradeniya

DPT OF CIVIL ENGINEERING UNIVERSITY OF PERADENIYA | [GITHUB](#)

Nov. 2018 - Dec. 2018

- The Project is based on a research done by the dpt of Civil Engineering
- This novel formulation is proposed for nonlinear static analysis of planar reinforced concrete structures
- Developing the algorithm in order to improve time and space efficiency

Intelligent Road Traffic Controlling System

University of Peradeniya

DPT OF COMPUTER ENGINEERING | [GITHUB](#)

Feb. 2019 - Dec. 2019

- Automated vehicle traffic controlling system
- Sensor based implementation using embedded devices, networking, security and front end back-end developments. The system also has a software based vehicle traffic simulator.
- This is a solution for time-based traffic light controlling system prevails in Sri Lanka.

Real-Time Vehicle Identification Using Image Processing

University of Peradeniya

DPT OF COMPUTER ENGINEERING | [GITHUB](#)

Feb. 2018 - Aug. 2018

- Our aim was to build an Automated Vehicle number detection system to avoid vehicle tollbooth in highway entrances.
- The system compromises with a database which includes necessary data to identify the validity of the vehicle, driver's details and system is capable of automated billing system.

Who is Speaking

University of Peradeniya

DPT OF ELECTRICAL ENGINEERING

Dec. 2017 - Jan. 2018

- Tried to identify the speaker by Fourier analysis

Pera SAP-I

University of Peradeniya

DPT OF COMPUTER ENGINEERING | [GITHUB](#)

Feb. 2018 - Nov. 2018

- 8-bit Minimum Computer (AKA Simple As Possible Computer - SAP) that made from simple logic ICs, flip-flops and a few memory modules
- The computer has 16-bytes memory and it's maximum clock speed is around 5 Hz

Courses/Certificates

Completed	Machine Learning , Coursera Machine learning course taught by Andrew Ng. Verify at www.coursera.org/verify/TFJ65ZRM4R35	Stanford University
Completed	Convolutional Neural Networks , Coursera CNN course taught by Andrew Ng. Verify at www.coursera.org/share/a4bfc544ccd271aff2e0137024bfa5bf	deeplearning.ai

Work Experience

IgniterSpace

Kandy, Sri Lanka

ROBOTICS, PROGRAMMING & DEVELOPMENT INSTRUCTOR

Jan 2019 - Feb 2020

- Working as a technical Instructor

Dept of Computer Engineering, University of Peradeniya

Kandy, Sri Lanka

CASUAL INSTRUCTOR

Feb 2020 - Current

- Working as a hardware lab Instructor

Extracurricular

2005-2011	Troop Leader , 1st Kandy Dharmaraja Scout group, Troop number 7
2012-2013	Secretary , Efficient Energy using and Saving Society of Dharmaraja College, Kandy
2012-2013	Member , Science Society of Dharmaraja College, Kandy
2012-2013	Member , Astronomy Society of Dharmaraja College, Kandy
2009-2011	Team member , Athletics team, Dharmaraja College, Kandy
2018-2019	Member , Hackers Club, dpt of Computer Engineering, University of Peradeniya

Volunteering

2016-2018	Team leader , of the AISEC, Incoming Global Talent and Global Volunteer(IGET/IGE) team at the University of Peradeniya
Current	Instructor , at Weekly Interactive coding sessions for freshman class of University of Peradeniya

Referee

Dr. Isuru Nawinne

Lecturer,
Dpt of Computer Engineering,
University Of Peradeniya,
Sri Lanka.
isurun@ce.pdn.ac.lk