Praveen Dhananjaya

Contact Information:

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Summary:

Computer Engineering Undergraduate who is highly motivated about Robotic and automated system development. Seeking an internships in cyber physical systems for the time period 20xx.xx.xx

Education:

Present Bachelors of Engineering:- Faculty of Engineering , University of Peradeniya Sri

Lanaka

Specialization: Computer Engineering

Current GPA: 3.364 / 4.000

Present Rapid Embedded Systems Design and Programming: - Arm EDUCATION ME-

DIA ACCELERATED LEARNING

industry-standard Arm Mbed API tool and Keil MDK

2021 Neural Networks and Deep Learning: coursera

Grade Achieved: 92.80/100

2021 Cisco Cybersecurity:- Cisco networking academy

2016 GCE A/L:- Sri chandananda buddhist college

Maths - A , Physics - B , Chemistry - B ,

z-core 1.83, national ranking - 1206 from 25000+

2013 GCE O/L:- Sri chandananda buddhist college

6A pass and 2B pass

https://www.overleaf.com/project/6086bfc0458c94d04dd8b5fd

Technical Skills:

Programming languages

Java , C , C++, Python

Hardware programming

arduino, AVR C, PIC, ARM Assembly

FPGA

iverilog

Database

MySQL

Version control
Web Development
PCB design
3D modeling
kinematics system

Github
HTML , CSS , php
Altium , eagle , easyeda
Fusion 360 , solidworks
kinematics for robotic system

Academic Projects

1.Smart warehouse management system:

Developing automated warehouse handle by AGV and Robot arm so this system is capable handle loading/unloading of goods. And e-shopping website so worldwide customers can buy their products.

Technologies : fusion 360, custom PCB easyeda , Arduino ESP12 and uno , mqtt , AWS server , Python base UI ,

github: https://github.com/cepdnaclk/e16-3yp-smart-pharmaceutical-warehousing

2.FPGA base processor:

Fully functional 32 bit CPU single thread pipeline processor. Which include ALU , ram , instruction memory , data memory and ext.

Technologies: Harvard architecture, iverilog

3. 8 bit computer:

8 bit common bus computer architecture. Tri stage base control system. Capable handle low memory consume algorithms (ex:- fibonacci sequence)

 $\begin{tabular}{ll} \textbf{Technologies:} Common bus architecture , custom PCB , Python base program interface(assembly) \\ \end{tabular}$

github: https://github.com/praveendhananjaya/8-bit-computer

4.hospital management system:

Web application with Database for hospital patient and medicine management in order to billing and patient data re-coding .

Technologies : MySQL base data management system. This system run on apache php server and HTML user interface.

5. Fractal Visualizer:

JAVA OOP base programme.

Technologies: JAVA, OOP, Witch is accelerated by tiled base multi threading

Other Projects

1. Micro Mouse:

14×14 Maze solving robot

Technologies : Arduino uno base robot with schedule base multi multiprocessing , robot navigates to target using A^* algorithm and using flood fill algorithm find out the shortest path , Custom PCB , IR base sensors with active filtering

2. Surveillance camera system

Suspicious activity tracking. ex:- Face covers , Abandoned packages , suspicious object , unauthorized people

Technologies: python, tensorflow

3.CNC

3 axis computer numerical control machine.

Technologies : fusion 360 , mach 3 controllers , toolpath , material fabrication steel aluminium wood plastic , high induction motor control profile

4.landslide monitoring system

landslide monitoring system , low cost landslid detection and alarming system **Technologies :** flexible piezoelectric sensor and single analyse , UDP communication using WiFi network

smart wound

Certificates and Competitions

- 2019 **SLIIT MicroMouse** *3rd place* 14×14 Maze solving robot competition. Using small robot
- 2019 **Aces hackathon** *1st place* Surveillance camera system Suspicious activity monitoring system.
- 2018 **SLIIT MicroMouse** *3rd place* 14×14 Maze solving robot competition. Using small robot
- 2018 Aces hackathon 1st place landslide monitoring system landslide monitoring system , low cost landslid detection and alarming system coding Competitions

12-hour algorithmic coding nationwide competition

- 2020 Aces coders 4th place from
- 2019 Mora Xtreme 4.0. 1st place
- 2019 Jaffna coders 4th place
- 2019 Aces coders participation
- 2018 Mora Xtreme 3.0. participation
- 2018 Aces coders participation

Extracurricular Activities

- 2019 Member of the Music Society of the University of Peradeniya
- 2018 Member of the drama Society of the University of Peradeniya
- 2011 Member of the Art Society of school
- 2010 school rugby team
- 2009 school hockey team

Other Interests and Hobbies

3D modeling and digital art CNC furniture and decorations vehicle repair and modification

References

Dr. Isuru Nawinne

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