NISHANKAR SATHIYAMOHAN

B.Sc(Hons) Computer Engineering(UoP)

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EDUCATION

Nov 2018 - Present
University of Peradeniya
B.Sc (Hons) Computer Engineering
- CGPA   3.50/4.00

Jan 2009- Aug 2017
Hartley College Point Pedro
GCE Advanced Level - Physical Sciences
- Combined Mathematics A
- Chemistry A
- Physics B

TECHNICAL SKILLS

- Languages
  - C, Python, Java, JavaScript
- Frameworks
  - Node.js, Express.js, React.js, Django
- Database
  - MySQL, MongoDB
- Cloud
  - AWS
- DevOps
  - Azure DevOps
- Version Control
  - Git

ACHIEVEMENTS

- MoraXtreame 7.0 | 2022
  - 12-hour nationwide algorithmic coding competition

- Aces Hackerthon | 2019
  - 12-hour inter university coding competition

- Hackfest | 2022
  - Project: NGS data Analysing ToolKit

- MoraXtreame 5.0 | 2020
  - 12-hour nationwide algorithmic coding competition

- Deep Speed | 2019
  - Semi-finalist
  - Line following robot competition Top10 out of 80 team participants.

PROFILE

The person with a passion for full-stack software Development, Machine Learning, and Deep Learning, curious enough to learn and practice new technologies from different fields of Computer Science and Engineering, and willing to get a handful of experiences in the industry.

PROJECTS

NGS Data Analyzing Tool Kit   2022 - Present

- A user-friendly web application that analyzes the genome **Next Generation Sequencing(NGS)** data to find the biomarkers of Alzheimer's disease.
- *Contribution: Developed the back-end using Django.*
- **React.js | Django | Python | MongoDB | Azure boards**

Smart Home   2021 - Present

- Secure mobile application to control and monitor home appliances using sensors and micro-controllers.
- *Contribution:*
  - *Developed the back-end using Node.Js and Express.Js.*
  - *Hosted the application on AWS.*
- **Flutter | Node.js | Express.js | MongoDB | AWS**

Grocery Management System (Easy Shop)   2020

- Web application to manage the grocery details of a supermarket in a database.
- *Contribution*
  - *Developed the front end using HTML, CSS, and JavaScript,*
  - *Database using MySQL*
- **HTML | CSS | JavaScript | Bootstrap | PHP | MySQL**

Smart Building   2022

- Developed hardware and software prototypes for a Smart Building System with sub-divisions -- Safety, HVAC, Energy, Safety, and Access Control.
- *Contribution*
  - *Storing data from the sensors and actuators to a MongoDB database.*
  - *Retrieving the data helps to predict the safest path when a fire is detected.*
- **NodeRed | MQTT | MongoDB**

8-bit processor   2020

- Developed an 8-bit single-cycle CPU to support a custom ISA with an ALU, an 8x8 register file, control logic, and a memory sub-system with caching techniques.
- **Verilog HDL**

INTERESTS

- Machine Learning
- Deep Learning
- Web Development
- Dev Ops

PERSONAL SKILLS

- Team work
- Quick learning
- Problem Solving
- Communication

LANGUAGES

- Tamil   Native
- English   Professional Proficiency
- Sinhalese   Elementary Proficiency

REFERENCES

Prof. Roshan G. Ragel

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Sampath Deegalla

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MINI PROJECTS

Tool to generate and display fractals   2020

- A tool to create mandelbrot or Julia fractals using Java OOP concepts. Multi-threading and Synchronization techniques were used.
- **Java**

QR code Generator   2020

- A QR code-generating application using ASCII characters without any external C libraries.
- **C**

Chat Application   *2022*

- A Real-Time Chat application where users can register, login, and join a group to chat.
- **Node.js | Express.js | React.js | Socket.io**

Morse Code Receiver and Transmitter   2019

- A real-time morse code generator using python and Arduino microcontroller. LED, Buzzer used for the Transmitter, and LDR used as the Receiver.
- ***Contribution***
    - *Designed and build the circuit. wrote the code in python.*
- **Python | Arduino**

CERTIFICATIONS

- Image Processing with Python | Coursera | Sept 2020
- AI For Everyone | DeepLearning.AI |Oct 2020
- Algorithmic Tool Box | University of California San Diego | Aug 2022
- Programming for Everybody | University of Michigan | Sept 2020
- Google Cloud Building Scalable Java Microservices with Spring Boot and Spring Cloud | Google | Oct 2022

EXTRA CURRICULAR ACTIVITIES

- 1 st place at National Cadet Crops training camp   2013
- Aces Design Team member   2022
- Volunteer ***Project Nenathambara***   2021
    - Teaching Python and Arduino to school children