UNNIKRISHNAN R. MENON

menon.uk1998@gmail.com | +91 – 8376048185
VIT University, Vellore, Tamil Nadu – 632014 | github.com/7enTropy7
linkedin.com/in/unnikrishnan-menon-aa013415a | quora.com/profile/Unnikrishnan-Menon-5

Education

B.Tech in Electrical and Electronics Engineering 02/2017 – Present
Vellore Institute of Technology, Vellore
Current CGPA (3 semesters): 8.62

Class 12 Board Examination (CBSE): 94.2% 2017
Summer Fields School, New Delhi

Class 10 Board Examination (CBSE): 10 CGPA 2015
Summer Fields School, New Delhi

Research Interests

- Artifical Intelligence
- Quantum Computing
- Cryptography
- Computer Vision
- Socket Programming
- Astrophysics
- Reinforcement Learning
- Genetic Algorithm

Technical Skills

- **Microcontroller** – Arduino, Raspberry Pi, 8051 Assembler, NVIDIA Jetson, FPGA
- **Programming Languages** – Python, C++, C, Java, Go, Assembly, Verilog, CUDA MPI
- **Mathematical Packages** – MATLAB, R
- **Typesetting Software** – LaTeX
- **Other** – TensorFlow, Keras, OpenAI Gym, NumPy, Qiskit

Work Experience

02/2019 – Present
Technical Head of Electrical Department
roboVITics, the official robotics club of VIT

07/2018 – Present
High Power Circuit Designer
The team designed a 120 lbs combat robot that has performed well in international RoboWars
Achievements

- Finished in top 7 internationally at RoboWars, TechFest'1, IIT Bombay
- Secured third position in RoboWars, Kurukshetra'19, Anna University

12/2017 – 02/2019
Core-Committee Member
roboVITics, the official robotics club of VIT

- Successfully completed multiple robotics projects involving Machine Learning, Computer Vision, Artificial Intelligence, IoT etc.

Achievements

Winner of HackerTech 2019 12/2019
Secured First Position in this 24 hr long Hackathon where I worked on project SPARC (Smart Power Allocation using Reinforced Clusters).

Winner of VIT Hack 2019 09/2019
Won VITHack organized by VIT University in collaboration with Honeywell

Winner of Developer's Sprint of Code Hackathon by CodeChef 02/2019
Secured the First Position in this 36 hour Hackathon. I worked on the hardware and a facial emotion recognizer for an electoral system that eliminates majority of the problems in the existing system

Quora Top Writer 2018 01/2018 – Present
Got the coveted Top Writer's Quill on my Quora profile for writing quality technical content. Got New York Time's subscription and a t-shirt as a reward from Quora

6 NEO Observations (All India Asteroid Search Campaign) 2016
I used a software called Astrometrica to detect potential celestial objects and I ended up spotting 6 Near Earth Objects (NEO's)

Personal Projects

09/2019 – 10/2019
Path Prediction for Smart Vehicles

- A Path Prediction Algorithm which forecasts future path taken using RNN−LSTMs and on top of that optimizes the predicted trajectory using Deep Q-Learning Algorithm.

08/2019 −Present
Riff−Raff Encryption

- Decimal (Negative/Positive,Unranged) Encryption for Unbreakable, Impenetrable Security.

12/2018 – 02/2019
Self Learning Crawler

- This bot combines the Q Learning algorithm with a robotic arm to come up with an optimum policy for moving forward

05/2019 – 12/2019
RSA Encrypted Password Online Storage

- This code can be used to save your passwords or other confidential data remotely to a server with a layer of RSA encryption (coded from scratch) without any worries of it getting hacked.

02/2019 – 02/2019
Comprehensive Electoral Solution Suite

- Secured First Position in DEVSOC'19

01/2019 – 02/2019
Prepaid Energy Credits based Power Distribution System

- Machine learning based algorithm for predicting power usage in a common household.

10/2018 −Present
AI Development for Video Games

- Deployed genetic algorithms and other advanced reinforcement learning algorithms in various Video Game environments like Super Mario, Pacman, Snakes, Flappy Birds etc.

05/2018 – 06/2018
TensorFlow ChatBot

- An RNN and LSTM based Chatbot that responds well to meaningful queries.

02/2018 – 04/2018
Autonomous Rubik's Cube Solver

- Developed an algorithm in under 800 lines of C++ code that predicts the correct moves to solve a scrambled $3 \times 3 \times 3$ Rubik's Cube.

References

Awnon Bhowmik, College Laboratory Technician
Department of Mathematics
CUNY Borough of Manhattan Community College
+1 (929) 462 8832, abhowmik@bmcc.cuny.edu