

# Rohit Rangaraj

Technophile, Robotist and AI Enthusiast  
rohitrangaraj2005@gmail.com

## EDUCATION

### SUGUNA PIP SCHOOL

GRADE 11 - 12 (CBSE)

Grad. Mar 2022 | Coimbatore, India

### SSVM WORLD SCHOOL

GRADE 1 - 10 (CBSE)

Grad. Mar 2020 | Coimbatore, India

10th Finals : 86.4%

## SKILLS

### PROGRAMMING

Fluent

- React • Python • C++ • Android
- Bash • Vim •  $\LaTeX$

Skilled

- Java • JavaScript • C • C#
- ROS • CSS • HTML5

Familiar

- Haskell • React Native • Swift • SQL

### MACHINE LEARNING

- TensorFlow • PyTorch • Keras
- NumPy • Pandas • SciKitLearn

### ROBOTICS

Areas of Work

- Simultaneous Localization and Mapping
- Object Classification • Computer Vision

Ecosystems

- Intel RealSense • Tetrix • Vex
- Modern Robotics • EV3 • NXT

IOT

- Arduino • Raspberry Pi
- NodeMCU • ESP8266 • ESP32
- Networking Concepts in IOT
- Electronic Circuits

### DEVOPS

- Docker • Kubernetes • GCP
- Firebase

### GAME DEVELOPMENT

- Unity3D • Unreal Engine

### 3D MODELLING

- Fusion 360 • Creo (Assembly)
- AutoCAD • Blender

## RESEARCH

### A BENCHMARK OF DEPTH PREDICTIVE SLAM ALGORITHMS

- How does using **Convolutional Neural Networks** to process RGB sensor data affect the accuracy of state estimates from **Simultaneous Localization and Mapping** algorithms with different sensor models (RGB-D, RGB, D)
- Mentored by Emily Sheetz from the **University of Michigan, Ann Arbor**
- In the process of submission to **IEEE MIT Undergraduate Research Technology Conference** under the **Robotics and Controls Track**

### MULTI-VARIATE ANALYSIS OF THE MEME STOCK PHENOMENA

- A **multi-variate statistical analysis** of hedge fund asset suppression and community response to "meme stocks" (\$AMC and \$GME) with **Machine Learning**
- Mentored by Samuel Showalter from the **University of California, Irvine**
- **Final Paper**

## COURSES

- HarvardX CS50: Introduction to Computer Science
- UMich's ROB 530: Mobile Robotics: Methods & Algorithms (Graduate course)
- MITx 11.126x: Introduction to Game Design
- CMU's 15-112: Fundamentals of Programming and Computer Science
- Andrew Ng's Deep Learning Specialization

## ACHIEVEMENTS

|      |                      |  |
|------|----------------------|--|
| 2019 | <b>International</b> | <b>3<sup>rd</sup> Prize</b> , World Adolescent Robot Contest, Chongqing, China |
| 2018 | <b>National</b>      | <b>Leader</b> of Finalist Team, FIRST Tech Challenge Relic Recovery            |
| 2017 | <b>National</b>      | <b>Finalist</b> Team, FIRST Tech Challenge Velocity Vortex                     |
| 2019 | <b>School</b>        | <b>President</b> , Science Club for 5 years                                    |
| 2018 | <b>Karate</b>        | <b>Brown</b> Grade Belt Holder   |

## LINKS

Personal Website:// [Rohit-Rangaraj](#)

Github:// [Rohit-Rangaraj](#)

Github:// [Revno-Official](#)

Instagram:// [\\_rohi\\_21\\_](#)

Mobile : **+91 8610909439**