# Rohit Rangaraj

Technophile, Roboticist 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 ŁTĘX

Skilled

- Java JavaScript C C#
- HTML5 CSS ROS

Familiar

• Haskell • React Native • Swift • SQL

#### MACHINE LEARNING

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

# LINKS

Personal Website:// Rohit-Rangaraj

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