USC Viterbi School of Engineering

ANTARIKSH NARAIN

308, 2700 Ellendale Place, California, USA +1 (213) 292-3522 antarikshnarain@gmail.com

EDUCATIONAL BACKGROUND

University of Southern California (USC), Los Angeles, California, USA *July 2019 - Present*

- Master of Science in Computer Science, Intelligent Robotics (CGPA 3.34/4)
- Relevant Coursework: Robotics, Machine Learning, Advanced Algorithms

Vellore Institute of Technology (VIT), Chennai, India *July 2013 - May 2017*

- Bachelor of Technology, Computer Science and Engineering (CGPA: 8.94/10)
- Relevant Coursework: Algorithms, Computer Architecture, Embedded Systems, Image Processing, Pattern Classification

TECHNICAL SKILLS

Programming Languages: C#, C++, Python, MATLAB
Web Technologies: HTML, JavaScript, TypeScript
Frameworks: ROS, Django, MVC
Simulations: Gazebo
Database Technologies: SQL, MongoDB
Applications: Azure Function Apps, Bot Framework
Hardware: Arduino, Raspberry Pi, Beagle bone
Operating Systems: Linux (Mint, Ubuntu), Windows

PROFESSIONAL EXPERIENCE

Space Engineering Research Center, USC - Student Researcher, ISI *September 2019 - Present*

- Building flight and control software with simulation using ROS and Python.

Microsoft, India - Technical Consultant, Business Applications *July 2017 - May 2019*

- Developed solutions using Microsoft technologies, Azure and Dynamics 365 for clients.

Ariose Software, India - Software Developer, Intern *January 2017 - June 2017*

- Developed tool for monitoring and managing servers for the organization.

Microsoft, India - Software Developer, Intern *July 2016 - August 2016*

- Contributed to software development for monitoring and measuring software project quality.

R2 Robotics, India - Engineer, Intern *November 2015 - April 2016*

- Created an environment mapping drone and bomb-defusing robot prototype.

KEY PROJECTS

Fetch Robotics Warehouse Simulation *January 2020 - Present*

- Developing warehouse pick and place simulation with multi-robot environment using ROS, Gazebo, and C++.

Geo Linked Attachment and Tags *January 2017 - May 2017*

- Created an Android application where users can tag messages to objects in environment. These messages are retrieved based on user's location, orientation and camera feedback.

Cat and Dog classifier *July 2016 - November 2016*

- Designed a Machine Learning model to solve Kaggle problem of Cat and Dog classifier. Model Accuracy: 89.388%

Content Recommendation for Articles *January 2016 - May 2016*

- Designed an application to recommend related articles from dataset and web based on input write-up. The software uses natural language processing with a web crawler to process and recommend content to the user.

Gesture Recognition Interpretation and Transmission *July 2015 - November 2015*

- Built an application on MATLAB where system recognizes different gestures and interprets actions or words. The software identifies handwritten words and uses a messaging application for communication.

Regulated IoT *July 2015 - November 2015*

- Synthesized a hardware prototype to convert a normal switchboard to IoT enabled. It uses relays to supplant switches, optocoupler to replace regulator and a current sensor to calculate device power usage.

LEADERSHIP AND PARTICIPATION

- Conducted technical workshop at Microsoft Ready 2018 to coach application development using cloud technology.
- Volunteered to take seminars and organize hackathons for lateral and new hires at Microsoft.
- Delivered sessions on Arduino programming and sensor integration as part of Robotics Club, at VIT.
- Lead the Programming Department at 'Team Technocrats' at VIT University for 18 months.
- Participated in Asia Broadcasting Unit Robocon 2015 and 2016.
- Volunteered in coordinating event Digital Quest at VIT University annual carnival 2015 and 2016.