Contact 30 Wachusett St, Apt 1, smalla@wpi.edu|+1(774)253-9046

Information

EDUCATION

Worcester, MA 01609

EXPERIENCE Carnegie Mellon University, Field Robotics Center

> Advisor: Sebastian Scherer (Sept'15-April'16) Research Associate Advisor: Katerina Fragkiadaki (May'17- Present)

Research Intern

Worcester Polytechnic Institute, Jan 2017 - (Expected) Dec 2018

Master of Science in Robotics Engineering

GPA: 4.0/4.0

Vellore Institute of Technology, Vellore, India

July 2012 - May 2016 CGPA: 8.79/10

Bachelor of Technology in Electronics and Instrumentation

Projects Planning Under Uncertainty for Infrastructure Inspection using UAV

Developed mathematical model to find optimal velocities under uncertainty for coverage planning using TSP planners, implemented on dji-matrice using onboard computer and hukoyu laser scanner.

https://goo.gl/sv4d1X

Gesture Controlled UAV

Developed robust gesture control using Neural Networks and implemented on ARDrone.

Using LEAP: https://goo.gl/jI2MuZ Using KINECT: https://goo.gl/zEODg8

Autonomous Inventory Management using UGV

Developed mobile robot and equipped it with custom made 3DOF robotic arm. KINECT sensor was used for RGBD mapping and localization using RTABMap https://goo.gl/mmbx2V

Person Following UAV

Built a quadrotor and automated it to follow GPS coordinates using onboard navigation system.

Developed an Android Application to send the GPS co-ordinates to the Quadrotor.

https://goo.gl/5SUABr

Imitation Learning for Baxter Robot (currently ongoing)

Developing Deep Reinforcement Learning agorithms to mimic and learn human actions with the help

of Vicon Motion Capture.

Vaegae Naveen, Venkata Lakshmi Narayana K, Srikanth Malla "Development of an Intelligent **PUBLICATIONS**

Pressure Measuring Technique for Bellows using Radial Basis Function Neural Network" Sensors and

Actuators, A. Physical http://goo.gl/eC5X3z

Harjatin Singh Baweja, Tanvir Parhar, Srikanth Malla "Gesture Control Interface Using Machine Learning Algorithms." International Journal of Advanced Research in Computer Science and Software Engineering (IJARCSSE), Volume. 5, Issue. 09 (2015) ISSN: 2277-128X. http://goo.gl/BxX6ZC

Relevant

Programming Languages: C, C++, Python, Android

Proficiencies Software: MATLAB, ROS, OpenCV, Multisim, Solid Works, CUDA, PCL, OpenRave, MoveIt,

Simulators (Gazebo, MuJoCo), Deep Learning (Keras, Tensor Flow), OpenAI

Hardware: Microcontrollers (Arduino/Atmega, MSP 430), Onboard(Odroid, Udoo, Raspberry Pi),

Flight Controllers(Pixhawk, Ardupilot), Signal Conditioning

MHRD Scholarship (2012-2016) AWARDS AND

Awarded by Ministry of Human Resources and Development, Central Government of India. ACHIEVEMENTS

Special Achievers Award 2015,

Awarded by VIT University, Vellore, India.

CERTIFICATIONS Intro to Parallel Programming (Udacity **CS344**) Self Driving Car Nano Degree (Udacity ND013)

Management SKILLS

Technical Head Technical Manager

Creation Labs, VIT, India (2013-15) IEEE-EDS, VIT, India (2012-13)

Event Organizer

Student Head

National Service Scheme (NSS), VIT (2014) Make-athon 2015, VIT, India