Anmol Modur

(508) 381-9459
43 Morrison Dr.
Rochester, NY 14623

Education

Masters of Science, Electrical Engineering with Robotics Option - Rochester Institute of Technology
Minor in Entrepreneurship; **GPA: 3.5**

Experience

TESLA
Autopilot Hardware & Material Flow Engineering

- Designed test systems for verifying stability and guidance in atonomous vehicles
- Designed algorithms to simulate and perform analysis on congestion on a facility in real time situations

Performance Motion Devices
Engineering Intern

- Worked with engineers to develop solutions using PMD Motion control systems.
- Worked with Stepper, Servos with encoder feedback, current loops, position loop feedback
- Used a 2 arm robot (5 axis) and a delta arm robot to make ketchup despensing machine.

RIT ITS
Tech Management

- Worked with students and faculty to manage, maintain and service computers and peripherals
- Worked with and managed confidencial information

RIT Multi Agent Bio-Robotics Lab
Lab Instructor / Teaching Assistant

- Teach a Robotics course to third year EE student.
- Help them develop the skills to work in a lab environment and with robots.

Skills

Programming Languauges:
C++, Python, C, Assembly, Java, Html, Css, Js, NodeJs, ExpressJs, ElectronJs, React-Native & More!

Tools:
ROS, Matlab, Soldworks, Docker, SPICE, Altera Quartus, Eagle, Altium

Awards & Honors

Hackathons: BostonHacks: 4th Overall; HackUMASS III: 2nd Overall; BigRedHacks: Pricelines Best use of API; BrickHacks: Best Business plan and invitation to RIT Entreprenership program; HackUMass II: Best Hack; HackRU: Best Merck App; HackRPI: Runners up for best humanitarian award

Links

http://github.com/starman360
http://devpost.com/starman360

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Projects

360 Radar for HRC
Designed a 360 degree mmWave radar for Human Robot Collaboration for tracking Humans in a robot workspace. This publishes a pointcloud over ROS showcasing movement in the space

Bio-mimicing Robotic Hand
Created a Robotic Hand that mimics the use of flexor and extensor tendons on a human. Uses custom designed linear motors with position and current feedback controllers to vary torque and motion.

Local Positioning System
Chief Engineer for Senior Design Team that created a modular 3d positioning LPS system for use indoors and out within cm accuracy. Also created software to interface with hardware.

3D-Lidar
Created an affordable 3D lidar that uses 2-2D spinning lidars and interfaces with ROS to output pointclouds. This can be used for slam algorithms but focuses on the mapping rather than localization.

RIT Baja SAE
Data Acquisition Team; Work on NI systems and design test plans to record data on the vehicle. Perform data analysis and provide a comprehensive report. Designed the CVT Dyno for the driveline team.

Publications

IEEE-International Conference on Automation Science and Engineering (CASE)

Adamides, Odysseus & **Modur, Anmol** & Kumar, Shitij & Sahin, Ferat. (2019). A Time-of-Flight On-Robot Proximity Sensing System to Achieve Human Detection for Collaborative Robots. 1230-1236. 10.1109/COASE.2019.8842875.