

Aamir Husain

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📁 Experience

Robotics & Automation Engineering Intern | Siemens

Jul 2018 - Sep 2018

📍 Princeton, NJ

- ↔ Worked with a small team of engineers to design a highly modular and fully autonomous farming system
- ↔ Improved existing performance by creating a scalable, decentralized, multi-agent scheduling and path planning algorithm using ROS, Python, and object oriented programming to control and coordinate a fleet of mobile robots

Software Developer & Consultant | FAST Enterprises

Aug 2015 - Aug 2017

📍 Washington, DC

- ↔ Developed new and simple online tax forms (primarily with SQL and .NET) for the residents of Washington, DC which drastically improved the way both locals and government workers handle taxes within the District
- ↔ Listened to the customer's needs with client-side consulting to implement state-specific tax laws in a user-friendly way

📁 Selected Projects

Multi-Robot Teleoperation & Localization | MS final project

Apr 2018 - Present

📍 Evanston, IL

- ↔ Final Masters project that involves the construction of three mobile omni-directional robots each equipped with a delta robot arm, as well as developing code for single agent localization and multi-agent formation control
- ↔ Low level control/odometry done using C/C++ and higher level robotic control uses custom and open source ROS packages

Day Zero Predictor | Machine learning on a global scale

Apr 2018 - Jun 2018

📍 Evanston, IL

- ↔ Consolidated data on global water usage, population, and climate to train a machine learning algorithm that could predict when a country would reach its day zero to raise awareness for wasteful water consumption
- ↔ Trained an instance-based nearest neighbor model with 10-fold CV that performed with 88% accuracy

Argo: An Autonomous Suitcase | Constraints on mobile robots

Jan 2018 - Mar 2018

📍 Evanston, IL

- ↔ Designed and built a ROS-enabled autonomous mobile robot that uses multiple PID controllers, a monocular camera, and a Raspberry Pi to follow a moving target (AR tag) at an average human walking speed
- ↔ This project explored the constraints encountered when building mobile robots, as well as putting emphasis on human centered design to make products that are useful while staying friendly and inviting

🎓 University

Master of Science: Robotics

Northwestern University '18

Bachelor of Science: Biomedical Engineering

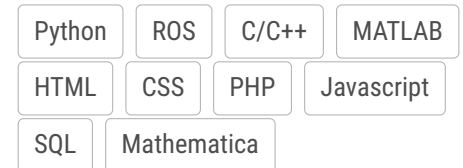
George Washington University '15

Istanbul Exchange Program

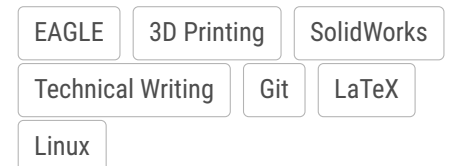
Boğaziçi Üniversitesi '13

🔧 Skills

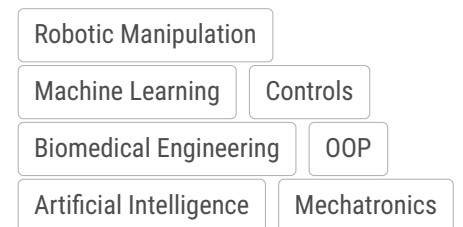
</> Programming



🔧 Tools



📍 Concepts



📍 Contact

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