

ANDREW DAHDOUNH

Robotics Engineer



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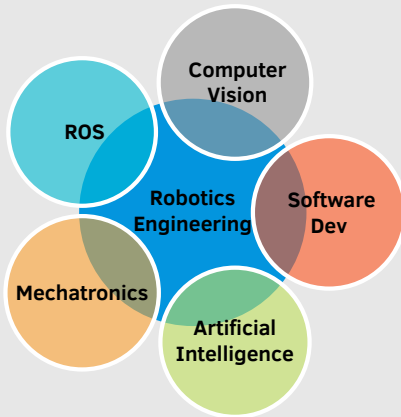
/in/andrewdahdouh



atomoclast

Skills

Overview



Programming

0 LOC —————> 10000 LOC

Python • Linux

Embedded Systems • Mechatronics

C • C++ • ROS

Projects

Autonomous Rover - A differential wheeled mobile robot capable of path planning, state estimation, and navigation through static environments.

CS6475 - An Unsorted Structure from Motion Pipeline in C++.

CS7637 - An AI agent capable of visually solving 3x3 Raven's Progressive Matrices.

Team Cerebro - A anthropomorphic Robot Arm with a Brain-Machine Interface for control.

Experience

Nov 2017 - Present **Robotics Software Engineer**

Verb Surgical

- Experience in Robotics, Controls and Motion Planning, VR/AR, Physics Simulations
- Experience developing real-time SW in C++ with strong debugging skills.
- Solid understanding of Kinematics and Dynamics.
- Strong background in object oriented programming
- Experience developing software as part of a development team (experience with code reviews, version control, unit tests)
- Strong background in Math and Physics
- Computer Vision experience with processing endoscopic video.

Dec 2015 - Nov 2017 **Robotics Engineer**

Houston Mechatronics, Inc

- Advanced robotics system research, development, and implementation. Experience in a highly dynamic research and development environment on advanced intelligent, dexterous and autonomous robotic systems. Job tasks and duties include: Computer Vision and Machine Learning, Supervised autonomy, Motion planning, Tele-perception, Robotic Simulation, and Dexterous Control.
- Development in Python and C++ with utilization of the ROS framework in a highly dynamic Agile/Scrum development team.

Oct 2014 - Aug 2015 **System Developer**

Optimation Technology, Inc

- Job tasks include identifying system requirements, developing technical design documentation, software development, and installation of software and hardware based solutions.

June 2014 - Oct 2014 **Embedded Software Engineer (Contract)**

Advanced Pharmacy

- Development, testing, and maintenance of Kernel and RTOS code for mechatronic pharmaceutical dispensers.
- Development and implementation of software in Embedded C.

Aug 2013 - June 2014 **Embedded Software Engineer (Contract)**

Baker Hughes

- Embedded software engineering experience for hydraulic fracturing and coil tubing industrial equipment.

Jan 2013 - Aug 2013 **Design Engineer**

Oceaneering DTS

- Engineering position in a fast paced, high risk environment providing solutions and tooling for ROV systems in deepwater situations in subsea engineering.

Education

2018 - 2020 **MSc., Computer Science** Perception, Robotics and AI Georgia Institute of Technology, Online

2016 - 2017 **Robotics Specialization** Coursera

University of Pennsylvania

2008 - 2012 **BSc., Mechanical, Computer Engineering Technology**

Houston

University of

Publications

A. Dahdouh, M. A. Moges, L. Pollonini, "An integrated ear-mounted sensor for pulse oximetry and EKG measurements," in 2012 IEEE Health Innovations Conference, IEEE, 2012.