Zachary Nahman

Email : zach.nahman@gmail.com
www.zachnahman.com
Mobile : ASK
GitHub: https://github.com/znahman
LinkedIn: https://www.linkedin.com/in/zachary-nahman-50437a7b/

Education

- **Colorado School of Mines** — Golden, CO
  Master of Science in Computer Science; GPA: 4.0 — *Jan. 2018 – Dec. 2019 (Expected)*
- **Regis University** — Denver, CO
  Non-Degree Seeking in Computer Science; GPA: 3.8 — *Aug. 2016 – Aug. 2017*
- **Colorado School of Mines** — Golden, CO
  Bachelor of Science in Mechanical Engineering; GPA: 3.0 — *Aug. 2011 – May 2015*

Experience

- **MDA US Systems** — Boulder, CO
  Robotics Engineer Intern — *May 2018 – Aug. 2018*
  - **Software Testing - RSGS**: In support of the RSGS (robotic servicing of geosynchronous satellites) project, I built a test suite using Ruby within the COSMOS embedded hardware controller for testing of robot actuators. I also contributed GUI changes for increased clarity. Project codebase is version-controlled using git.
  - **Test Procedures and Assembly Procedures**: Utilizing technical writing skills, I created assembly procedures and testing procedures for flight hardware and ground support hardware for robotic actuators.
- **Wolf Robotics - A Lincoln Electric Company** — Fort Collins, CO
  Software Engineer Intern — *Jan. 2018 - Feb. 2018*
  - **Software Integration - Robotic Welding System**: Integrated control and safety software for a single robot, multi-station, robotic welding system. Developed scripts in the RAPID programming language for safe tool changing operations and welding of customer parts. Project codebase is version-controlled using Tortoise SVN.
- **Wolf Robotics - A Lincoln Electric Company** — Fort Collins, CO
  Project Engineer — *Jun. 2015 - Dec. 2017*
  - **CAR-W (Computer Aided Robotics for Welding)**: Executed an 11 month relocation to Lockport, Louisiana to do on-site support and integration of a first-of-its-kind CAR-W enabled robotic welding gantry. CAR-W is automated path planning software for automatic generation of welding programs. I was the first to test the latest software release and provide feedback to the development team. I also attended agile code sprint meetings to drive development priority based on customer feedback. (Similar to Scrum Product Owner Role)
  - **Operator and Weld Planner Training**: Taught training courses on-site for Robot Operators (x2 people in attendance) and Weld Planners (x6 people in attendance) interacting with the CAR-W software package.

Projects

- **NASA Robotic Mining Competition 2015**: Served as Lead Engineer for the Excavation Subsystem. Designed a bucket ladder excavator for a planetary rover. Also served as the team's NASA liaison.

Achievements and Certifications

- **1st Place Team Lead - CSM Newmont Innovation Challenge**: Served as Team Lead for the winning team in CSM's Newmont Innovation Challenge (May 2018). Proposed a novel system for improving underground mine safety and productivity using a 3D sensor mesh network. Proof of concept demonstrated using ROS, Velodyne Puck LiDAR, and Arduino. Won access to over $10,000 in project funding.
- **Engineering Intern License**: Passed the Fundamentals of Mechanical Engineering (FE) Examination earning the engineering intern license in the State of Colorado (July 2015)
- **Eagle Scout**: Earned the rank of Eagle Scout in the Boy Scouts of America (April 2009). Led my peers in the construction of bird houses and duck houses for Carter Lake in Loveland, CO

Skills

- **Programming**: Java, C++, Python, Ruby, C#, CUDA, PHP (Laravel), AWS S3, AWS CloudFront, LaTeX
- **ROS (Robot Operating System)**: Used ROS for various projects and familiar with ROS architecture in Linux
- **Linux**: Familiar with unix command line and various distributions of Linux