Gowan Rowland

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EXPERIENCE

Luminosity Lab, Tempe, Az — *Engineer*

June 2018 - PRESENT

Modeled robotic systems in solidworks. Leveraged Python and Flask to build a networked backend for the KiP robotics platform. Implemented spline-based motion profiling driving algorithm. Wrote interfacing dashboard for the KiP platform using web technologies.

STARA Technologies, Gilbert, Az — *Engineering Intern*

June 2016 - July 2016

Designed and modeled heavy duty sensor mounting system for Ground Surveillance Tower System (GSTS) in Solidworks. Modeled and designed interior for larger Ground Control Station (GCS) in Solidworks. Wrote contract proposals for upgraded GSTS platform.

Sabercat Robotics, Scottsdale, Az — *Team Lead*

Student August 2013 - August 2017, Mentor August 2017 - PRESENT

Designed, tested, simulated, and modeled robotics systems to play in the FIRST Robotics Competition using Solidworks and Fusion 360. Manufactured parts using a Tormach PCNC 1100, PT-22 plasma table, and Fusion 360 for CAM. Sliced and FDM printed parts for optimal strength and durability using Cura and several FEA tools.

Acme Motorwerks, Scottsdale, Az — *Mechanic/Machinist*

May 2009 - PRESENT

Repaired and restored cars. Weld steel, plasma cut, sandblast, paint, and so on. Worked on older models. Rebuilt several engines.

EDUCATION

Arizona State University, Tempe, Az — Class 2021

October 2015 - PRESENT

Mechanical Engineering. ASU Rowing Fall 2018.

Saguaro High School, Scottsdale, Az — Class 2017

August 2013 - May 2017

Attended Saguaro High School for entire Highschool Career. Had significant roles in leading the robotics team, the Model United Nations, and The Saguaro Code Club.

SKILLS

Solidworks
Fusion 360 (simulation, topology optimization, CAM)
FDM Printing (Cura)
Tormach Operation
Plasma Table Operation
Machining
Welding
Classical Control Systems
Full Stack Web Development
Automotive Repair
Microsoft Office
Linux (Debian derivatives and Arch)

LANGUAGES

Java, C++, C, JS, Coffeescript, bash, Lua, Rust, and Python

FRAMEWORKS

Electron, Bootstrap, jQuery, JUnit, OpenCV, scikit learn, wpilibj, redis