Mattison Rose

Mobile: (734) 864-6155 | Email: matmrose@umich.edu
309 N Division St. Ann Arbor, MI 48104, USA

EDUCATION

University of Michigan Sep 2017 – May 2019
Masters of Science in Engineering (EECS Robotics)
GPA: 3.67/4.00
- Autonomous research platform control and artificial intelligence
- Mobile robotics, SLAM, machine learning and data science

CQUniversity Mar 2012 - Nov 2015
Bachelor of Electrical Engineering (First Class Honors)
GPA: 7.00/7.00 (HD in all subjects)
- University Medal (Highest GPA of Bachelor graduates)
- 14 additional industry and research awards

EXPERIENCE

Daifuku (Novi, Michigan) Aug 2019 – Present
Autonomous Vehicle Electrical Engineer (Full Time)
- Managed 4 full life cycle electrical system vehicle designs in control, communication, power, and safety systems providing comprehensive production quality designs efficiently and timely
- Conducted company research into LIDAR system integration for ROS based SLAM projects, providing a C++ based mapping platform to consumer specifications
- Developed and improved company BOM creation software, eliminating human component selection errors in the design process by 100%

Veoneer (Southfield, Michigan) Jan 2019 – May 2019
Electrical Hardware Design Engineer (Part Time)
- Individually developed PCBs, electrical test fixtures, harnesses and simulation aiding testing of prototype ECUs towards a commercially deployable product

AngloAmerican (Queensland, Australia) Jan 2016 – Jul 2017
Graduate Electrical Engineer (Full Time)
- Completed PLC automation projects by designing and coordinating plant electrical system upgrade, producing a 50% reduction in plant downtime and increase in throughput
- Managed numerous multidiscipline teams in electrical overhaul, component reliability and optimization projects, resulting in safe and efficient outcomes

RESEARCH EXPERIENCE

Graduate Research Project 2017 - 2019
- Integrated novel nano-manufacturing platform designs as a member of the Electro-hydrodynamic jet printing team by leading hardware research, design and construction

Undergraduate Thesis and Summer Scholarship 2015
- Led construction and control of a bipedal robotics platform as forerunner of Mechatronics/Robotics sector through use of C programming and Matlab simulation tools for future humanoid research

VOLUNTEER AND FREELANCE PROJECTS

Power PCB – First principles design of power distribution PCB for autonomous drone company 2019
Space Robotics Challenge – Robotics engineering support for resource utilization code 2019

SKILLS

- Electrical hardware design/rapid prototyping
- Power electronics/electric drive control
- Proficiency with test equipment (multimeters, oscilloscopes and logic analyzers)

- Python/C++
- Use of USB, SPI, I2C and UART
- Altium/Kicad/Eagle PCB design
- PLC Programming