

Tyler Jackson

tyjacks@umich.edu • 248-660-6647

Education

UNIVERSITY OF MICHIGAN, COLLEGE OF ENGINEERING

M.S. in Electrical Engineering: Systems

Ann Arbor, MI

Anticipated Graduation: December 2016

- GPA: 3.636/4.00
- Concentration in Controls with additional coursework in Micro-Electromechanical Systems (MEMS)

B.S. in Electrical Engineering

Graduation: December 2015

- GPA: 3.817/4.00 (Summa Cum Laude)

Work Experience

UNIVERSITY OF MICHIGAN, COLLEGE OF ENGINEERING

Graduate Student Instructor (GSI)

Ann Arbor, MI

September 2015 - Present

- Led two lab sections of 20 students, teaching the fundamentals of electrical engineering, solar power, and programming with Arduino
- Guided the work of two undergraduate Instructional Aides (IAs) in their teaching of two other lab sections

THE BOEING COMPANY

Electronic Flight Controls Engineering Intern

Philadelphia, PA

Summer 2016

- Developed dynamic model of electromechanical flight control actuators for use in real-time system integration testing
- Designed flight control software changes and collected and analyzed data in a lab environment to validate those changes
- Supported the design of a new hardware-in-loop (HIL) flight control system integration lab
- Led a group of interns in the design and construction of a quadcopter outside of work

STRYKER COMMUNICATIONS

Fixed Manufacturing Intern

Dallas, TX

Summer 2015

- Redesigned quality check test fixtures to allow for easier serviceability and uninterrupted testing
- Researched, tested, and implemented replacement of end-of-life components on router video processing cards

BORGWARNER INC.

Advanced Engineering Intern

Auburn Hills, MI

Summer 2014

- Worked on future hybrid-electric vehicle products which combined capabilities of stop/start, turbo-charging, and regenerative braking
- Simulated performance and requirements of motors/generators and energy storage units using MATLAB and Simulink software

AUTOLIV INC.

Continuous Engineering Intern

Auburn Hills, MI

Summer 2013

- Collaborated with coworkers to compare components of a seat belt system to reduce cost and inventory
- Tested and eliminated webbing in service parts to improve production rates and decrease waste using lean manufacturing principles

Project Experience

BINAURAL AUDIO SYSTEM – EECS 452

- Designed a system in MATLAB and C using a Raspberry Pi and a DSP board which took in audio input and output binaural audio

MAGNETO – EECS 451

- Created a program in MATLAB which took input from a webcam and determined the location of a person's hand

Extracurricular

ETA KAPPA NU (HKN) HONOR SOCIETY

Chapter Officer/Member

Ann Arbor, MI

2013 - Present

- Advisor (Fall 2016), National Conference Committee Member (Winter 2016), Historian (Winter 2015), Events Officer (Fall 2014)

UM SUPERMILEAGE

Engine Team Member

Ann Arbor, MI

2014 - 2015

- Repaired and added features to the vehicle engine to increase efficiency and reliability
- Collaborated with team members to manage the electrical architecture of the vehicle

Skills

- Proficient in MATLAB, Simulink, Microsoft Word, Excel, PowerPoint, Access, and SharePoint
- Experience with C, C++, Verilog, Stateflow, Cadence, and OrCAD