

ERIC MENG

CORE QUALIFICATIONS

- Hardware PCB-level design and knowledge in system architecture in general consumer electronics
- Design, simulation, layout, testing for analog, digital, and mixed circuitry
- Create and perform validation plans for products, verify signal integrity and ensure functionalities
- Ability to identify failures, troubleshoot and debug corresponding technical problem, investigate root causes and apply permanent solutions

PROJECTS

BLUETOOTH SPEAKER DESIGN – INTERNSHIP PROJECT ([WEBSITE](#))

Designed a portable Bluetooth speaker to gain experience in hardware and acoustic design, I was responsible for all the electrical aspects of the project, including architecture, circuit design, schematic capture, PCB layout, parts procurement, soldering, assembly, and tests.

STEREO RECONSTRUCTION – MACHINE VISION COURSE PROJECT ([WEBSITE](#))

Convert a pair of rectified stereo image into a 3D point set. The project was done in C++ without using the OpenCV feature matching library.

PEER-TO-PEER TELEOPERATION BETWEEN TWO ROBOTS – ROBOTICS COURSE PROJECT ([WEBSITE](#))

The project uses two Novint Falcon robots, and the programming is done in MATLAB. A slave robot follows the path of the master robot as the master robot is being manipulated. A force feedback is implemented on the master robot if the robot experiences an external force.

FORSIGHT – CAPSTONE PROJECT ([VIDEO](#))

A proof-of-concept wearable prototype that is designed to be worn by visually impaired patients in an indoor environment for navigation.

WORK HISTORY

GRADUATE TEACHING ASSISTANT – QUEEN'S UNIVERSITY SEPT 2017 – APR 2018

Responsible for running workshops and labs to guide students with their term projects

ELECTRICAL ENGINEERING INTERN – FLEX MAY 2015 – AUG 2016

Assist senior engineers in developing new products, support multidisciplinary design teams to ensure optimized electro-mechanical system

TEACHING ASSISTANT – MCMASTER UNIVERSITY JAN 2015 – APR 2015, SEPT 2016 – APR 2017

Responsible for leading tutorials and labs, invigilate examinations for first year physics courses

EDUCATION

MASTER OF ENGINEERING, ELECTRICAL - QUEEN'S UNIVERSITY, KINGSTON

September 2017 – August 2018

BACHELOR OF ENGINEERING & MANAGEMENT, MECHATRONICS - MCMASTER UNIVERSITY, HAMILTON

September 2011 – April 2017 [5 Year Combined Program + 1 Year Co-op]

ACHIEVEMENTS

DEAN'S HONOUR LIST (2011, 2017)

Recognition for academic excellence in the final year by achieving a 10.6 GPA on the 12-point scale