

Guli Meng

Phone: (905) 920-8058

E-mail: menggl1993@gmail.com

<https://www.linkedin.com/in/guli-meng-97a40b8b>

Highlights of Qualification:

- Strong leadership skills, professionalism, responsible
- Great interpersonal skills, ability to work independently or with a team
- Outstanding organization, planning and time management skills
- Hardware design: Design Entry HDL, Orcad Capture, Allegro PCB Editor
- Troubleshooting and debugging, system validation
- Lab equipment: Oscilloscope, Power supply, Battery simulator, Multimeter, Signal generator, Network analyzer, Spectrum analyzer, Electric load, etc.
- Experience with analog and digital circuitry
- Experience in product certification tests (UL, FCC, CE, EMC/ESD), simulate tests in-house
- Experience with power management (LDO, DC/DC, battery charging, etc)
- Experience with discrete semiconductor (Diodes, amplifiers, FET, BJT, LC/RC/RLC filters)
- Experience with data communication protocols (I2C, SPI, UART, USB)
- Experience with standard RF interfaces (BTLE, NFC), baseband
- Experience with embedded software development and ARM Cortex-M processors
- Proficiency in windows and Linux OS
- Programming languages: C, python, assembly, VBA
- Familiar with AutoCAD, NX Siemens Software, Matlab, Labview, PLC
- Knowledge in operation management, project scheduling, budgeting, etc.
- Experience working with ODM, EMS, understand entire product development process for mass volume production design
- Ability to travel, relocate, and work flexibly

Education:

Bachelor of Engineering and Management, Mechatronics Co-op

McMaster University, Hamilton, ON

Expected completion May 2017

- Currently in level five of a five-year program that integrates the technical education of engineering with a business education for management
- Named to the Deans' Honour List
- **Capstone Project:** “ForSight” is a wearable prototype that is designed to be worn by visually-impaired patients in an indoor environment for navigation. The system consists of a few pieces, one being a custom-designed belt with six ultrasonic sensors and one infrared sensor. The six ultrasonic sensors are evenly spaced with 120° of coverage to detect distances to obstacles in the user’s path. The infrared sensor points downwards at an angle and detects changes in elevation (stairs). The gathered information from the belt is processed by an Arduino, and then sent to a Raspberry Pi through Bluetooth. A camera, placed at shoulder level, captures images in front of the user, and image processing is done on the Raspberry Pi to determine objects at all heights. After the Raspberry Pi has processed all the information, it communicates an open path to the user via Bluetooth bone conduction headphones.

Work Experience:

McMaster University - Teaching Assistant (PHYS 1D03 & 1E03)

Sept 2016 – present

- Teach tutorials and prepare lessons on example problems
- Guide students through labs
- Invigilate examinations
- Mark lab reports and tests

Flex - Electrical Engineering Intern

May 2015 – Aug 2016

- Troubleshoot/debug electrical system (Consumer Electronics)
- Hand on assembly, rework boards using soldering station and microscope
- Create validation plan based on requirements (both board level and system level)
- Perform acoustic and environmental testing
- Perform variety of tests (high/low temperature, stress test, IPX, etc) under specified environment
- Cooperate with Mechanical and System teams with design validation
- BOM managements and research for alternative options (performance, price, size, etc)
- Interact with customer/clients in a professional manner
- Interface with suppliers
- Hardware design project (Bluetooth Speaker)
 - Develop project scope, create block diagram and component selection
 - Create symbols and draw schematic
 - Create padstacks and footprints
 - Components placement and PCB layout using Allegro PCB editor
 - Mount components onto PCB and perform board and system level bring up

McMaster University - Teaching Assistant (PHYS 1E03)

Jan 2015 – Apr 2015

- Teach tutorials and prepare lessons on example problems
- Guide students through labs
- Invigilate examinations
- Mark lab reports and tests

McMaster Hospitality Services (East Meets West Bistro)

Sept 2012 – Sept 2014

- Communication and customer service

Extracurricular Activities:

Student Member

Sept 2011 – present

McMaster Engineering Society

Private Tutoring (Volunteer)

Sept 2010 – June 2011

Teach high school math and physics

Church Camp Assistant (volunteer)

Aug 2010

Organize summer camp for children

Librarian Assistant (Volunteer)

Sept 2009 – May 2010

Customer services and sorting books, DVDs, CDs, stamping

Social Community Worker (volunteer)

Aug 2009

Organize “Summer Fest” event for the local community