Guli Meng
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(LinkedIn) (Personal Website)

Highlights of Qualification:

- Hardware **PCB-level design** and knowledge in **system architecture** in general consumer electronics
- Design, simulation, layout, testing for **analog, digital, and mixed circuitry**
- Experience with supporting **multidisciplinary design teams** to ensure requirements are satisfied
- Experience with embedded software development and **ARM** Cortex-M processors
- Expertise in **hands-on assembly**, reworking boards using **soldering** station and microscope
- Create and perform **system validation** procedures to ensure functionality and **signal integrity**
- Ability to identify failures, **troubleshoot and debug** corresponding technical problems, investigate root causes, and create permanent solutions
- Expertise with lab equipment: **Multimeter**, **Oscilloscope**, **Network analyzer**, **Spectrum analyzer**, Power supply, Battery simulator, Signal generator, Electric load, etc.
- Proficiency with Cadence design package: Design Entry HDL, OrCAD Capture, PSPICE, Allegro PCB Editor
    - Symbol creation, **schematic capture**, padstack and footprint creation, **PCB layout**, and component placement

Education:

Bachelor of Engineering and Management, Mechatronics Co-op (McMaster University) 2011 – 2017

- Recognition for **academic excellence** by achieving a 10.6 GPA on the McMaster's 12-point scale in the final academic year
- Named to the Deans' Honour List
- **Capstone Project (Website):** *ForSight* is a wearable prototype that is designed to be worn by visually impaired patients in an indoor environment for navigation.

Skills:

- Experience with standard RF interfaces (BTLE, NFC)
- Experience with power management (LDO, DC/DC, battery charging, etc)
- Experience with discrete semiconductor (diodes, amplifiers, transistors, LC/RC/RLC filters)
- Experience with data communication protocols (I2C, SPI, UART, USB)
- Experience in product certification tests (UL, FCC, CE, EMC/ESD)
- Knowledge of crystal oscillator to generate system clock signals
- Knowledge of applying proper grounding to reduce noise, thermal management
- Knowledge of board stackup, microstrip/stripline transmission line routing techniques, controlled impedance termination, and signal integrity simulations
- Programming languages: C, python, assembly(x86), Verilog, SQL, HTML/JavaScript/CSS
- Familiar with AutoCAD, MATLAB, LabVIEW, BlueSuite from CSR
- Operating systems: Windows and Linux OS
- Ability to work independently and within a team
- Great interpersonal skills, strong oral and written communication skills
- Experience working with ODM, EMS, understand entire product development process from conceptual stage to completion for mass volume production design (scope, schedule, cost, technical, resource, process adherence, and risk management)

Work Experience:

McMaster University- Teaching Assistant (PHYS 1D03 & 1E03) — Sept 2016 – Apr 2017

- 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

- Support multidisciplinary design teams to ensure requirements are satisfied
- Troubleshoot and debug electrical system (Consumer Electronics)
- Hands-on assembly, rework PCBs using soldering station and microscope
- Create and perform validation plan based on requirements (both board level and system level)
- Work with off-site labs to obtain certification (EMC/EMI, ESD, UL), simulate tests in house
- BOM managements and evaluate alternative options (performance, price, size, etc)
- Document test results, generate technical reports based on collected data
- Interact with customer/clients, interface with suppliers
- **Hardware design project: Bluetooth Speaker (Website)**
    - Develop project scope, analyze feasibility of requirements
    - Create block diagram and component selection
    - Create symbols and draw schematic
    - Create padstacks and footprints
    - Components placement and PCB layout
    - Mount components onto PCB and perform board and system level bring-up
    - Troubleshoot and improve design flaws, apply on-board rework

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

- Team communication to maintain efficiency and provide 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