MAXWELL WU

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OBJECTIVE

To obtain a full-time engineering position where I can use and expand my skills in mechatronics, embedded software, electrical engineering, and design.

EDUCATION

Stanford University
Stanford, CA   *(9/2009 - 12/2013, 4.3 years)*
BS and MS in Mechanical Engineering (Mechatronics Depth).
Included significant computer science coursework.
MS GPA: 3.94

EXPERIENCE

Software Engineer
Delphi Silicon Valley Lab; Mountain View, CA   *(2/2014 - present)*
Integrating technology with CAN buses and vehicles. Combining mechatronic systems with automotive applications.

Teaching Assistant, Mechaphonics
Stanford University; Stanford, CA   *(9/2013 - 12/2013)*
Helped to develop a new course concentrating on Android devices interacting with mechatronics devices. Assisted students in creating Android controlled quad-copters and team-based entrepreneurial projects.

Automation Engineering Intern
Apple; Cupertino, CA   *(6/2013 - 9/2013)*

TEAM PROJECTS

Mechatronics Corporate Project (three-person team) - Volkswagen/Audi
Developed a complete mechatronic project including Android, Bluetooth LE communication, CAN modules, PCB design, and more to allow a smart device to communicate with and control functions in a vehicle. Minimized power consumption to specifications.

Mechatronics (four-person teams, four major projects)
Autonomous robot for competition with wireless communication (me218bbunnybombers.weebly.com)
Standardized wireless controller and robot (me218cfunnybunny.weebly.com)
Arcade style games (me218nanana.weebly.com)
Autonomous robot for competition (circuitsunited.weebly.com)

Mechanical System Design (four-person team)
Two projects involving mechanical design, motors, and gear. Constructed vertical movement and four-legged movement mechanical systems with other specifications, such as energy, time, and cost expectations. Optimized gear ratios, transmissions, and movement.

Capstone Design Project (four-person team)
Worked with Neurosky to incorporate their product, the Mindset, in an open-ended project. Given a budget of $1000, prototyped and manufactured a robot from scratch that could move around and grab objects with only input from head movements and brain waves.

SKILLS

Programming - Fluency and experience in C, Java, Android, iOS, C++, and MATLAB. Machine learning knowledge. Extensive embedded programming experience.

Specialized Engineering Software - Experience in Altium (PCB schematics and layout), SolidWorks (CAD), and MotionGenesis (simulation).

Micro-controllers - Extensive experience with PIC, Arduino, Freescale C32, and E128 micro-controllers. Practice and knowledge of UART, SPI, etc.

Manufacturing - Knowledge and practice with shop machines and processes (mills, lathes, laser cutters).