Fan Zhao

Software Engineer at Apple Inc. (FileMaker)
San Jose, California

Summary

- Strong programming skills in C, Java and Python.
- Good understanding of Java and Python OOP design concept, algorithms and data structures.
- Experience on HTML/CSS, MySQL database.
- Experience on Google Closure API. Using Closure library and Closure compiler working with Javascript.
- Experience on Python and Django framework on website design and development.
- Experience on data crawling using Mechanize and Beautiful Soup.
- Hands on experience on data analysis such as Time Series using Python build in library (pandas, numpy etc.)

Embedded Software Engineer at Research Lab of International Technological University
- Experienced in embedded systems design both on hardware and software views.
- One year experience in lower level and embedded software/ firmware/drivers development.
- Hands-on experience on versatile development systems: AVR, ARM7, etc
- Hands-on experience on PCB design, debugging and signal analysis
- Understanding the protocol of UART, SPI, I2C interface
- Strong analytic and debugging/trouble-shooting skills of complex embedded systems.
- Strong background of CAD tools and VLSI design flow

Bio-Electronic Engineer at Research Lab of International Technological University
- Proficient in MEMS theory calculation and structure analysis
- Experienced in MEMS simulation on structure and performance
- One year experience on Non-invasive Glucose Sensor structure design and performance simulation
- Hands-on experience on COMSOL, HFSS simulation tools.

Experience

Apple
4 years 9 months

Software Engineer
June 2016 - Present
5201 Patrick Henry Drive

Software Engineer Internship
March 2015 - May 2016 (1 year 3 months)
5201 Patrick Henry Drive

International Technological University (ITU)
Research Assistance
February 2011 - March 2014 (3 years 2 months)
355 W. San Fernando St., San Jose, CA 95113

Traffic Light System:

- Developed a traffic light system by Java, J2SE.

- Traffic light and controller system implementation using single thread (Executors).

- Vehicle moving simulation using Timer and Executors (Java concurrent library).

- Bug fixed (traffic light changes sequence design)

- Test bench development and improvement.

Autonomous Car-like Robot System (indoor)

- Monte Carlo Algorithm implementation using C language

- Map learning and update using machine learning

- Gesture control testing and debugging

Body monitor system

- Developed a low power portable human body monitor

- Algorithms and drivers/firmware development for multiple sensors: accelerometer, humidity, etc

- Algorithms improvement to catch the hardware requirement and to get more accurate display

- PCB demo board design, implementation and debugging

- PCB 2nd version design, bug fixing and functions added

Non-invasive Glucose Sensor

- Developed a bio-compatible blood sugar monitor
- Sensor specification, principle research and material research
- Sensor structure design and performance simulation with COMSOL and HFSS
- Basic fabrication training at Stanford SNF laboratory

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Education

International Technological University
Master's degree, Electrical Engineering · (2010 - 2012)

Fudan University
Bachelor's Degree, Physics · (2006 - 2010)