Shi-Yu(Michael) Lin

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SUMMARY

- Software System Engineer, Silicon Motion Technology summer internship. Actively seeking Full-time software development opportunity.

EDUCATION

Arizona State University **Tempe, AZ**
MS in Computer Engineering GPA: 3.5/4.0 *Jan. 2019 - Dec. 2020*

National Sun Yat-Sen University **Kaohsiung City, Taiwan**
BS in Electrical Engineering GPA: 3.1/4.0 *Sept. 2012 - Jun. 2016*

TECHNICAL SKILLS

- Relevant Coursework: Foundation of Algorithm, Computer Architecture, Embedded Operating System Internals, Data Mining, Cloud Computing, Distributed Database System
- Programming Languages: C, C++, Python, Java, JavaScript, Shell/ Bash scripting
- Tools and Framework: Linux, Raspberry Pi 3, Android Studio, Git, AWS, Firebase, GCP, MongoDB, PostgreSQL

PROFESSIONAL EXPERIENCE

Silicon Motion Technology **Hsinchu City, Taiwan**
Software System Engineer Intern *Jun. 2019 - Aug. 2019*

- Developed an Analog to Digital Converter module on 32-bit ARM Cortex M7 processor STM32 EVB Board.
- Built application based on STM32 Hardware Abstraction Layer and communicate with peripherals.
- Participated in testing SSD product and introduced this new tool, improved the overall testing efficiency by 30%.

PROJECTS

Side Projects

- Web application implemented on Node server synchronized YouTube videos via socket.io between clients.
- Implemented path-finding algorithms (A*, Dijkstra, BFS, DFS) and visualized with python pygame.
- Distributed Downloading System. Server implemented on Node where request is received from android app clients. File is partitioned and downloaded separately among clients, then send to one device and merge them.

Course Projects, CSE546 Cloud Computing *Spring 2020*

- Built an elastic and auto-scaling application that utilizes AWS EC2/ S3 and Raspberry Pi to achieve real time object detection with Darknet framework.
- Designed an android delivery app that utilizes Firebase real time database and integrated with backend matching app server and deployed on Google App Engine.

Assignments, CSE530 Embedded Operating System Internals *Spring 2020*

- Developed kernel device driver on Intel Galileo Gen 2 board. Experience on I2C, SPI, socket interface communicating with HCSR, 8x8 LED matrix. Experience implementing system calls and Kprobe debug tools.

Assignments, CSE520 Computer Architecture *Spring 2019*

- Cache replacement policy SHIP / Branch Predictor gDAC implemented on GEM5 simulator for X86 processors.