Zui Tao

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OBJECTIVE

To obtain a software engineer summer internship in the field of systems or big data utilizing my analytical skills, solid computer science knowledge and my cloud computing experience

EDUCATION

Carnegie Mellon University — Pittsburgh, PA
Master of Science in Information Networking — May 2018
Selected Coursework: Packet Switching and Computer Networks, Intro to Computer Systems, Embedded Systems

Shanghai Jiao Tong University(SJTU) — Shanghai, China
Bachelor of Science in Electrical and Computer Engineering — August 2016
GPA: 3.80/4.0
Selected Coursework: Operating Systems, Machine Learning, Data Mining, Principles of Database Systems
Teaching Assistant for Applied Calculus, Intro to Computer Organization and Design of Microprocessor Based Systems

SKILLS

Language: (Proficient) C/C++, (Intermediate) MIPS Assembly, Bash, (Beginner) Java, ARM Assembly, Python
Software: Linux, Matlab, Xilinx ISE
Languages: English (Fluent), Chinese (Native Speaker)

EXPERIENCE

Intel Corporation — Shanghai, China
Big Data & Cloud Computing Internship — December 2015 –May 2016

- Participated in a six-month individual project evaluating an Intel-built, open source big data platform Trusted Analytical Platform's industrial feasibility
- Implemented TAP to a five-node cluster with Openstack, CDH and Cloud Foundry
- Presented project findings to senior leadership, resulting in favorable feedbacks

UM-SJTU Joint Institute Digital Circuits and Systems Laboratory — Shanghai, China
Undergraduate Research Member — December 2014 –August 2015

- Developed an innovative algorithm that simplified digital circuits given the error rate threshold and the algorithm utilized signal probability based cut and extended don't care terms
- Assisted in a PhD student's research on logic synthesis for approximate computing circuits.

ACADEMIC PROJECTS

Face Detection Using Convolutional Neural Network, SJTU — Fall 2015

- Cooperated with Intel to design and implement a real-time face detection algorithm
- Applied sliding windows and image pyramid to preprocess each frame of the video
- Limited execution time per frame to 40ms using Cifar-10 Neural Network under Caffe framework

PIC32 Based Electronic Air Band, SJTU — Summer 2015

- Achieved air bass drum and piano features based on two PIC32 boards through interrupt using Embedded C
- Utilized accelerometer, light and ultrasonic sensors to accurately detect the movements of the body
- Communicated with the PC via UART, played and recorded the music on PC with Matlab

Identification of Native English Speaker, SJTU — Spring 2015

- Implemented MFCCs on Matlab to extract the unique audio features of a person's speech
- Trained the datasets using support vector machine and neural network in Matlab to reach an error rate at 9%

Pipelined Processor Modeling, SJTU — Summer 2014

- Simulated MIPS Architecture pipelined CPU in Verilog HDL
- Demonstrated the model on an FPGA board by displaying the register's values on LCDs

AWARDS and HONORS

SJTU Dean's List — All Semesters
Meritorious Winner in Mathematical Contest in Modeling — April 2015
SJTU Merit Student (Top 5% in SJTU) — October 2014