Tingjun (Martin) Ma

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Career Objective

To be able to qualify for an internship position of **Software Developer** in 2017 Summer.

Education

UNIVERSITY OF VIRGINIA **Charlottesville, VA**
Master of Engineering in Computer Engineering Aug. 2016 - Present
Cumulative GPA: 4.0/4.0

SOUTH CHINA UNIVERSITY OF TECHNOLOGY (SCUT) **Guangzhou, China**
*Bachelor of Engineering in Information Engineering (**Elite Class**)* Sep. 2012 - July 2016
Cumulative GPA: 3.43/4.0, Major GPA: 3.71/4.0

Technical Skills

- **Computer Languages**: Python $^{+++}$ Java $^{+++}$ Javascript $^{++}$ HTML/HTML5 $^{++}$ CSS $^{++}$ Android Development $^{++}$ VHDL $^{++}$ Assembly $^{+}$ XML^{+} C++ $^{+}$ C $^{+}$
- **Applications:** Microsoft Visual Studio Eclipse Dreamweaver Quartus II Matlab AutoCAD
- **Operating Systems:** Windows Linux

Publications & Awards

- Outstanding Senior Project Nomination June 2016
- Yao, Ruohe, **Ma, Tingjun**, Su, Shaoyan. (2015). Design and Implementation of 24-bit Parallel Prefix Adder Based on Sklansky Structure. *Modern Electronics Technique*, (38)21, 145-148 Nov. 2015
- **Third Prize Scholarship** and **Merit Student** for two consecutive years at SCUT 2014 & 2015

Researches & Projects

Robot and Human Interaction with Vision and Audio Aug. 2016 - Dec. 2016

- Accomplished robot walking and gestures showing using Python based on Linux and Raspberry Pi 3
- Implemented visual recognition with Pixy and speech analysis with PyAudio and programmed to respond via APIs
- Embedded emotions and synergic expressions and created APIs for higher hierarchy for further development
- Designed the Blackjack game on the robot and interactively played the game between robot and humans

Real-time Handwriting Recognition Oct. 2016 - Nov. 2016

- Applied kNN algorithm on selection of best matches in Machine Learning and completed training using Python
- Recognized real-time numbers written on writing pad and achieved accuracy of 98.84% in numbers recognition

Bicycle GPS Recorder and Outdoor Kits (Android Application) Mar. 2015 - June 2015

- Recorded GPS coordinates where bicycles parked and retrieved GPS information from SMS sent by the host on bicycles
- Utilized Baidu Map API to guide users to the bicycle location with planar map and street view
- Combined compass, gradienter, flashlight and multifunctional clock together using Java for outdoor bicyclers

Internship Experience

The Fifth Electronics Research Institute (CEPREI Laboratory) Guangzhou, China
Ministry of Industry and Information Technology - IT Intern Sep. 2015 - Nov. 2015

- Imported and processed instruments standard data in database and verified with existing data
- Reported flaws on instruments based on test data and offered professional suggestions to clients