Huize Huang

huize@seas.upenn.edu | 215.220.5535
2930 Chestnut Street, Philadelphia, PA 19104

EDUCATION

UNIV. OF PENNSYLVANIA
MS in Electrical Engineering
Expected May 2020 | Philadelphia, PA
Cum. GPA: 3.9/4.0

POLITECNICO DI MILANO
BS in Computing Systems
Grad. July 2018 | Milan, Italy
Cum. GPA: 99 / 110

TONGJI UNIVERSITY
BS in Electronic and Information Engineering
Grad. July 2018| Shanghai, China
Cum. GPA: 4.3/5.0

LINKS

Github:// HuizeHuang
LinkedIn:// HuizeHuang

COURSEWORK

GRADUATE
Machine Perception
Statistics for Data Science
Programming Languages and Techniques
System-on-a-Chip Architecture
Intro. to Networks and Protocols

UNDERGRADUATE
Database System
Software Engineering
Robotics
Knowledge Engineering
Information Systems
Algorithms and Data Structures

COURSERA
Programming Foundations with JavaScript, HTML and CSS
Java Programming: Solving Problems with Software

SKILLS

PROGRAMMING
Proficient:
Java • C • Python • JavaScript • Assembly • HTML • CSS
Familiar:
C++ • Matlab• MySQL

EXPERIENCE

URUMQI SOCIAL SECURITY BUREAU Information Center | Technical Intern
Jul 2017 – Aug 2017 | Urumqi, China

- Ensured computers' smooth operations of whole company by maintaining computer software and hardware
- Daily checks peripheral devices of computers and helping staff deal with all kinds of problems with computers in time
- Earned hands-on experience and capability to solve practical problems of malfunction of computers and devices.

PROJECTS

OPENMV | Python | Computer Vision
Apr 2018 – Jun 2018 | Milan, Italy | Github:// HuizeHuang/openmv-project

- Worked with a group of 2 to implement simulation of Position Guided Vision robots by using Openmv camera sensor with python programming.
- Programmed the sensor to detect and track different color tapes, identify QR Code, and make branch decisions.
- Worked out the trade-off between high sensor frame rate and stable output to prepare it with angle and distance outputs as parameters for guiding robot vehicles in real use.

DEDUPLICATION & COMPRESSION | C | ZedBoard | FPGA
Oct 2018 – Dec 2018 | Philadelphia, PA | Team of 3

- Developed a compressor which received data in real time at modern Ethernet speeds and compress it into memory using deduplication and compression.
- Implemented Content-Defined Chunking to break the input into chunks, SHA-256 hashes to screen for duplicate chunks, and LZW compression to compress non-duplicate chunks based on C.
- Worked on both software acceleration and hardware acceleration to achieve higher speed; worked on software design and hardware mapped design to find a trade-off between energy, space and time.

MININET |Python|Network Protocols|Linux|Wireshark
Nov 2018 – Dec 2018 | Philadelphia, USA | Team of 2

- Created a virtual network topology using Mininet on Linux system, showcasing routing protocol BGP by using Quagga routing software suit.
- Designed a scenario where BGP attacks happened, setup BGP across ASs and an attacker hijacked a route, checking iptables to show how attacker worked.

CRACK VIGENÈRE CIPHERS | Java
Jan 2019 | Philadelphia, PA | Github:// HuizeHuang/VigenereCipher

- Solo project, working on breaking messages encrypted by Vigenere ciphers with unknown key and languages based on objected-oriented design.
- Chose corresponding data structures to enhance the program's efficiency.

STRENGTHS

- Benefit from breadth of education; Work well in both solo and group environments
- Quick adaptability and flexible with exposure to new tools, languages