Mingran Peng

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EDUCATION

University of Michigan, Ann Arbor   September 2019 – Present
M.S. in Computer Science and Engineering

Shanghai Jiao Tong University, Shanghai   September 2015 – June 2019
B.S. in Computer Science and Engineering
- **GPA**:   overall: **91.34/100**   major: **94.86/100**   **Rank**: **6/142**
- Selected Scholarships and Honors :
    - Merit Student, Shanghai Jiao Tong University, 2016 (top 3%)
    - Academic Excellence Scholarship, Shanghai Jiao Tong University, 2016, 2017, 2018 (top 10%)

INTERNSHIP EXPERIENCE

Machine Learning Software Engineer Intern, *Google LLC*   March 2019 – July 2019
- Enhance the performance of composition detection by applying data augmentation, such as balancing the ration of positive and negative data, flip, etc. Developed image similarity score computation algorithm based on ORB features and kNN algorithm. Implemented this algorithm on Android Device.
- Whole team re-org to develop GPay. Developed a microapp served as a simulator for bank accounts and cards, which makes testing easier. Deployed the microapp on internal server.

Background Development Engineer, *PayPal Holdings, Inc*   July 2018 – September 2018
- Designed and deployed a mail package management system using web-server architecture.
- Developed web-side using Vue framework and developed server-side with Spring and Flask framework. Used MySQL database to store package information. Crafted a pick-up module using face recognition to determine who is taking the package using TensorFlow. Accelerated the face recognition process by pre-store face feature vector and concurrent computing.

RESEARCH EXPERIENCE

AI-Empowered Detection of Driver's Phone Use   March 2017 – June 2019
Lab of Innovation on Network, SJTU
- Designed and implemented a system on mobile phones to judge its position by a single photo taken and implemented it on Android device using TFLite framework. Created a dynamic programming algorithm to arrange the sequence of the Neuron Networks according to user behavior and reduce time cost for one judgment by 30%.
- Conducted experiments and achieve 5.4% false positive rate with 8.4% false negative rate.

Autonomous Vehicle Obstacle Detection System Based on Embedded Device and LiDAR   March 2017 –March 2018
CyberC3 Intelligent Vehicle Labs, SJTU
- Supported by China National Undergraduate Innovation Program and applied for a patent.
- Formulated an algorithm for obstacle detection by calculating the axis variance of point clouds.
- Developed the whole system on ROS based on Raspberry Pi 3b.

TEACHING EXPERIENCE

Teaching Assistant of Prof. Xiaofeng Gao for Algorithm and Complexity (SJTU, CS214)   March 2019– July 2019
Teaching Assistant of Prof. Yong Yu for Data Structure (SJTU, CS358)   September 2016– January 2017

EXTRACURRICULAR ACTIVITIES

The 11th Annual International Conference on Combinatorial Optimization and Applications (COCOA 2017)	December 2017
International Workshop on Future Advanced Network Technology (FANT'18) (Publicity Chairs)	May 2018
ACM Turing Celebration Conference	May 2018
Google AI & ML Winter Camp	January 2019

PROFICIENCY

Programming: C\C++, Python, PyTorch, SQL, Java
Software: MATLAB, LATEX, Android Studio