Yutian Chen

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Objective

Graduate student working towards a M.S. degree in Electrical and Computer Engineering seeking full-time Software Engineer position. (Graduate in Apr. 2019)

Education

University of Michigan, Ann Arbor, MI Sept. 2017 to Apr. 2019
Master of Science in Electrical and Computer Engineering GPA: 3.9/4.3
Relevant courses: Algorithms, Parallel Computing, Computer Vision

University of Michigan, Ann Arbor, MI Sept. 2015 to Apr. 2017
Bachelor of Science in Computer Engineering GPA: 3.9/4.0
Relevant courses: Data Structure and Algorithms, Autonomous Robotics, Machine Learning

Shanghai Jiao Tong University, Shanghai, China Sept. 2013 to Aug. 2017
Bachelor of Science in Electrical and Computer Engineering Major GPA: 3.4/4.0

Work Experience

Emerson Automation Solution, *Software Engineer Intern, SH, China* May.2018 to Jul.2018

- Designed a DeltaV operator interface using VBA for operators to input and filter personnel information in a database.
- Maintained web parts using .NET Core framework, which are interfaces for operation records of a process.

Digital Control Lab, *Software Engineer Part-time* May.2018 to Jun.2018

- Designed a web page that can show the real-time values of gauges, using .NET Core framework.
- Optimized the web page by asynchronously updating the data through TCP socket at back-end.

Rtec Instrument, *Software Engineer Intern, CA* Jun. 2016 to Aug. 2016

- Designed a Windows application GUI with **WPF(C#)** in MVVM pattern for the customers to plot the data into line charts.
- Implemented extra functionalities, such as multiple chart display, data cropping and data filtering.
- Improved the capability and speed of the viewer to plotting over 1,000,000 points in 2 seconds.

Project Experience

Zebra Crosswalk Detection, *course project of Computer Vision* Mar. 2018 to Apr. 2018

- Developed a program to detect zebra crosswalks from human's view based on the geometric features.
- Implemented Back Propagation algorithm in **Matlab** to detect the crosswalk segments in the image even with occlusions.

Famous People Search, *major design in Shanghai Jiao Tong University* Jun. 2017 to Aug. 2017

- Developed a generalized web crawler in **Python** to collect images of famous people together with names.
- Designed a method to match images with the corresponding people's names in the web page.
- Improved the efficiency to 1.5 seconds per page in average and optimized the accuracy to 70% in our test.

BotLab Autonomous Navigation, *Course project of Autonomous Robotics* Jan. 2017 to Mar. 2017

- Led a team of four to develop a SLAM algorithm in **C++** for the Maebot to explore and navigate autonomously in an arbitrary maze.
- Tuned the parameters of the exploring algorithm and PID parameters to improve the navigation efficiency.
- Ranked1st in the competition among all the 12 teams to traverse the perimeter of a square and ranked 2nd in the final challenge to explore and escape from a maze.

Programming Skills

Language: C++, Python, C, C#, JavaScript, SQL
Operating System: Windows, Linux