4 Hedgecroft Dr. Pennington, NJ 08534

Kerry Liu

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EXPERIENCE:

Aumed Group Corp:

Computer Engineer Intern

Beijing, China

July 2015 - Sept. 2015

- Wrote and implemented code for a video magnifier for the sight-impaired. Powered by a PIC24 microprocessor and a HD video camera.
- Helped distribute and market products at a nursing home for the disabled and elderly.
- Collaborated with Coworkers and interacted with customers in Chinese.

Hopewell Valley Central High School Robotics Team:

Programming Team Leader

Pennington, NJ

October 2012 - May 2013

- Designed, wrote, and implemented code for a first place winning robot that participated in the 2013 FIRST FRC World Championships.
- Employed a variety of sensors and controllers such as encoders, accelerometers, and ultrasonic sensors.
- Implemented autonomous code with vision targeting and RPM/Speed control.

EDUCATION:

Bachelor of Science Computer & Electrical Engineering

Rutgers University - School of Engineering

New Brunswick, NJ August 2013–May 2017

TECHNICAL SKILLS:

Languages:

Proficient: C++, C, JavaScript, Java

Familiar: Python, HTML, CSS, Bash, MATLAB, Lua, System Verilog, MIPS assembly **Libraries/Frameworks/Software:** Git, SQL, MongoDB, Node.js, OpenCV, Solidworks, PSpice

Platforms: GNU/Linux, Mac OS X, Emacs, Windows XP/Vista/7/8/8.1/10

PROJECTS:

Parking garage optimization simulation:

January 2016-Present

- Software that monitors and dynamically manages the occupancy of parking garages to efficiently manage space and maximize profit.
- Uses a REST API for communication between different subsystems.

Chat Bot:

December 2015-Present

- Extends the functionality of Discord, a popular voice chat application with new commands and features such as image search and directly playing music through the voice channel.
- Employs a variety of Node.js modules and REST APIs.

Data aggregation tool:

May 2015-September 2015

- Collects and analyzes data from a strategy game to attempt to determine future trends.
- Utilizes Node.js, MongoDB, and Riot Games API.

Chrome extension:

December 2014-May 2015

- Autonomously plays a Facebook game called Mousehunt without any user intervention.
- Solves captchas intermittently by first "cleaning" the image then using OCR.

Face-tracking turret:

May 2014-September 2014

- Robotic turret which utilizes the OpenCV library with real-time face tracking.
- Differentiates between faces while filtering out background image noise.
- Measures distance from the turret to face, choosing the closest face to track.