Don Zheng

www.donzheng.com | github.com/zhaodong2013062 me@donzheng.com | (412) 519-4722

FDUCATION

CARNEGIE MELLON UNIVERSITY

Pittsburgh, PA

Aug 2013 - May 2017

MS: ELECTRICAL AND COMPUTER ENG

College of Engineering

GPA: 4.0/4.0

DUAL BS: ECE + ROBOTICS

College of Engineering Robotics Institute GPA: 3.7/4.0 University Honors

CONCORDIA INTERNATIONAL SCHOOL SHANGHAI

Shanghai, China Aug 2009 - May 2013

COURSEWORK

GRADUATE

Machine Learning
Dynamic Optimization
Robot Manipulation
Sensors
Neural Signals Processing
Internet and Wireless Policy

UNDERGRADUATE

Artificial Intelligence
Computer Vision
Computer Graphics
Robot Kinematics
Control Theory
Embedded Systems
Parallel Computing And Arch.
Digital + Analog Circuits Design

SKILLS

Languages + APIs

C++ • C# • C • Python • Matlab • SQL CUDA • OpenGL • SystemVerilog

Technologies

Machine Learning • Computer Vision Robotics • Hardware Prototyping

Arduino • RaspberryPi

OTHER

Teaching

Johns Hopkins - CTY Electrical Eng TA Carnegie Mellon - Robotics TA Concordia High School - Intro Programming, Game Theory Instructor Societies National Endowment for the Humanities

Eta Kappa Nu - Sigma Chapter

EXPERIENCE

AMAZON ROBOTICS | SEATTLE, WA

Software Engineer | Robotics Applications | Aug 2019 - Present | Java

• Applying robotics to Amazon Fulfillment Centers

MICROSOFT | SEATTLE, WA

Software Engineer | Azure IoT Central | Mar 2019 - Present | Python, C++

- Designed feature to integrate Azure IoT Edge into IoT Central
- Created Azure IoT Edge Python module to enable Modbus Gateway for IoT Central devices
- Added additional dev environment support for IoT Central on ESP32 devices

Software Engineer | Azure Data Factory | Jan 2018 - Mar 2019 | C#

- Designed and implemented system to migrate assets to a lower cost service, reducing COGS by 40%
- Enabled use of special characters in the product through string encoding
- Worked with partner teams to enable tight autoscaling on dependent services, further reducing COGS
- Owner and SME of one of the four major services of the product
- Worked directly with customers in livesite scenarios

QIMING VENTURE PARTNERS | SEATTLE, WA

Analyst Intern | Sept 2017 - Dec 2017

- Created landscape analysis of the digital health field in the US and China
- Performed technical due diligence on potential portolio companies

MICROSOFT | SEATTLE, WA

Software Engineer Intern | Azure Data Factory | Jun 2016 - Aug 2016 | R, C#

- Created capacity forecasting dashboard using time series forecasting (ARIMA)
- Added integration for multiple input datasets when using Data Factory with Azure Machine Learning

NOTABLE PROJECTS

LineBot | Github: bit.ly/2vajk4c

Multi-agent robot system for drawing large-scale illustrations on the ground.

RoboGoalie | Github: bit.ly/1QPAunO

Robotic 2-axis air hockey goalie with vision-based puck detection

Cache Simulator | Github: bit.ly/1Z5FdrB

Cache coherency simulator using MSI, MESI, and MOESI protocols

Zen Sandbox | Github: bit.ly/1TN97iH

Interactive sandbox with a dynamic, projected elevation map and hidden actuators to change the landscape

PUBLICATIONS

- [1] G. Zeglin, A. Walsman, L. Herlant, D. Zheng, Y. Guo, M. Koval, K. Lenzo, H. J. Tay, P. Velagapudi, K. Correll, and S. Srinivasa. Herb's sure thing: a rapid drama system for rehearsing and performing live robot theater. *IEEE Workshop on Advanced Robotics and its Social Impacts*, 2014.
- [2] D. Zheng, A. Walsman, L. Herlant, G. Zeglin, and S. Srinivasa. Herb the robot butler in david ives' sure thing. *HRI Workshop on Enabling Rich, Expressive Robot Animation*, 2015.