Don Zheng

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

EDUCATION

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
Java • C# • C++ • Python • Matlab • SQL
CUDA • OpenGL • SystemVerilog
Technologies
AWS • Microsoft Azure
Robotics • Electronics 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 II | Robotics Applications | Aug 2019 - Present | Java, TS

- Tech lead for several prototype robotic workcells, working independently on project management, architecting/design, and software implementation
- Built systems from the ground up using AWS services including Lambda, IoT/Greengrass, and DynamoDB
- Achieved cross-team impact by proactively creating/contributing to common libraries for developing edge device runtimes and integration testing
- Designed and built out mature, availability-zone based deployment infrastructure for team's products. Developed and implemented scalable deployment plans and protocols for the rapidly growing team.
- Mentored junior engineers, new hires, and interns

MICROSOFT | Seattle, WA

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

- Designed major feature to support edge devices in the product
- Created software modules on microcontrollers for product demos
- Created IoT Central firmware to support 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 total costs by 40%
- Worked with partner teams to enable tight autoscaling on dependent services, further reducing costs
- Owner and SME of one of the four major services of the product

QIMING VENTURE PARTNERS | Seattle, WA

Analyst Intern | Sept 2017 – Dec 2017

- 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

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.