Don Zheng

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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
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

MICROSOFT | SEATTLE, WA
Software Engineer | Azure IoT Central | Mar 2019 - Present
- 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
- 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
- Created capacity forecasting dashboard using time series forecasting (ARIMA)
- Added integration for multiple input datasets when using Data Factory with Azure Machine Learning

NEBULUS AUDIO | PITTSBURGH, PA
Software Engineer Intern | Jun 2015 - Aug 2015
- Developed system to determine genre of a peice of music - used Bayesian classification, clustering, and frequency-domain feature analysis

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.