

University Address
5032 Forbes Ave, SMC 5696
Pittsburgh PA, 15289-5696
857-636-0911 (Cell)

Yongyi Zhao
yongyiz@andrew.cmu.edu | yongyizhao.com

Permanent Address
8 Cobblestone Way
Billerica, MA 01862
617-916-1232 (Home)

Education

Carnegie Mellon University, Pittsburgh PA.
Bachelor of Science in Electrical and Computer Engineering
Overall QPA: 3.91/4.00

May 2018

Work Experience

Software Development Engineer Intern, Amazon.com

May 2017 – Aug 2017
Seattle, WA

- Working on Amazon AWS, Elastic Compute Cloud Team
- Designing and implementing container service

Carnegie Mellon University: Image Science Lab

Jan 2017 – Present
Pittsburgh, PA

- Developing light-field simulations on computational camera designs in Matlab
- Researching, developing, and analyzing accuracy of reconstruction models

Teaching Assistant (TA), 18-240 at Carnegie Mellon University

Aug 2017 – Present
Pittsburgh, PA

- Lead lab section of 30 students, weekly project to review and deepen students' understanding
- Perform course logistics: grading, tutoring at office hours, leading review sessions

Resident Assistant (RA), Carnegie Mellon University

Aug 2015 – May 2016
Aug 2017 – Present
Pittsburgh, PA

- Served as a student mentor and advisor for 28 residents, responsible for housing-related events
- Increased first-year engagement on campus by scheduling and implementing dorm events

Software Engineering Intern, Schrödinger LLC

June 2016 – Aug 2016
New York City, NY

- Developed GUI's for panels in Schrodinger's Material Science and FEP+ software suites
- Wrote script to calculate protein solution properties

Projects

Cartoon Interpolation Animator

Dec 2016

- Animate 2-D image using interpolation: manipulate using cage, skeleton, spline interpolation
- <https://www.andrew.cmu.edu/user/vasua/FinalAssignmentWriteup/FinalAssignmentWriteup.html>

Breakout for FPGA

Nov 2016

- Wrote RTL in SystemVerilog for classic arcade game Breakout on the FPGA
- Wrote VGA driver to communicate display for Altera DE2-115 FPGA

Racing Simulation using OpenCV Motion Detection

April 2015

- Presented as one of top 15 projects (of ~400 students) for 15-112 Spring 2015 Course
- For a general overview: <https://www.youtube.com/watch?v=HXx1ZZWuIXs>

Awards & Honors

Andrew Carnegie Society (ACS) Scholar
Tau Beta Pi Engineering Honors Society
Semiconductor Research Corporation Scholarship
CMU Summer Undergraduate Research Fellowship
National Merit Scholarship Finalist
Siemens Science Competition Semifinalist

Sep 2017
Nov 2016
Dec 2015
May 2015
May 2014
Oct 2013

Skills

Programming/Computing:

- **Strong:** Python, C, SystemVerilog; **Proficient:** C++, Matlab, Linux; **Limited:** Version Control (Git), Qt

Languages: Fluent in English and Chinese (Mandarin), working proficiency in Spanish

Relevant Coursework

15-462: Computer Graphics • **18-341:** Logic Design and Verification* • **18-349:** Introduction to Embedded Systems • **18-491:** Digital Signal Processing • **16-385:** Computer Vision

Activities

Mentor, Higher Achievement

Oct 2014 – Present

- Tutored group of 2-5 middle school students in project design and scientific method

*Upcoming or current course or event