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Yongyi Zhao
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8 Cobblestone Way
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Education

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

May 2018

Work Experience

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

Aug 2017 – Present
Pittsburgh, PA

- Lead lab sections of 30 students, helping with weekly project development
- Perform course logistics: grading, tutoring at office hours

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

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

Carnegie Mellon University: Image Science Lab

Jan 2017 – Present
Pittsburgh, PA

- Developing light-field simulations on lensless camera
- Researching, developing, and analyzing accuracy of reconstruction models

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>

Script for Calculating Properties of Protein Solution

June 2016 – Jul 2016

- Wrote python script which ran APBS calculations over millions of protein configuration
- Wrote script in parallel on Schrodinger's Jobcontrol framework because of volume of configurations

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

Tau Beta Pi Engineering Honors Society, Internal Secretary
Semiconductor Research Corporation Scholarship
CMU Summer Undergraduate Research Fellowship
National Merit Scholarship Finalist
Siemens Science Competition Semifinalist

Apr 2017
Dec 2015
May 2015
May 2014
Oct 2013

Skills

Programming/Computing:

- **Strong:** Python, C; **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
- 18-349: Introduction to Embedded Systems
- 18-341: Logic Design and Verification
- 18-792: Advanced Digital Signal Processing

Activities

Mentor, Higher Achievement

Oct 2014 – Present

- Tutored group of 2-5 middle school students in project design and scientific method
- Created and implemented projects to teach programming and experimental design