Ruiran Xun

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Education

Carnegie Mellon University

Pittsburgh, PA

B.S. Chemistry, B.S. Computer Science (dual degree) [QPA: 3.93]

May 2022

Previous courses: Principles of Imperative Computation, Introduction to Computer Systems,
 Principles of Functional Programming, Great Ideas in Theoretical Computer Science, Parallel
 and Sequential Data Structures and Algorithms, Foundations of Programming Languages

Work Experience

Carnegie Mellon University School of Computer Science

Pittsburgh, PA

Lead Teaching Assistant (15-122: Principles of Imperative Computation) August 2020 — present

- Manages course logistics and infrastructure in order to ensure the course runs smoothly
- Coordinates a team of 30+ teaching assistants and onboards new teaching assistants

Network Medical Management

Alhambra, CA

Software Engineer Intern

June 2020 — August 2020

- Designed and implemented a full-stack web portal from scratch for use by physicians
- Collaborated with business users and executives to add functionalities relevant to end users
- Utilized Bootstrap/jQuery/JsRender for front-end and Flask/SQLAlchemy for back-end

Carnegie Mellon University School of Computer Science

Pittsburgh, PA

Teaching Assistant (15-122: Principles of Imperative Computation)

August 2019 — present

- Assists in teaching code correctness, data structures, and algorithms to over 500 students
- Leads labs and recitations, facilitating a collaborative environment for student learning
- Guides student understanding of concepts and assignments one-on-one during office hours

Expii, Inc. Pittsburgh, PA

Content Writing Intern (Mathematics)

September 2018 — May 2019

- Created and moderated educational content targeted towards high school students
- Authored engaging problems, solutions, and explanations for topics in algebra and geometry
- Assisted in creation of mathematics curricula based upon existing pedagogical research

Projects

• FoodMood 2020

- Successful final round application submission to Capital One's Software Engineering Summit
- Utilized Bootstrap, Esri's ArcGIS API, HTML5 Geolocation, and the Yelp API

• Cleversign: A Real-Time American Sign Language Interpreter

2018

- Built a classifier that outputs English letters given visual webcam input of ASL hand signs
- Retrained Google's Inception-V3 convolutional neural network (CNN) using TensorFlow
- Utilized OpenCV for image preprocessing, i.e. isolating shape of the hand in each frame

Extracurriculars

Lunar Gala

Pittsburgh, PA

Web Developer

August 2020 — present

- Developing base and theme websites to host Lunar Gala's 2021 show in an online format

CMIMC Organizing Team

Pittsburgh, PA

Logistics Officer

May 2019 — April 2020

- Oversaw the operations of the Carnegie Mellon Informatics and Mathematics Competition
- Coordinated scheduling of 400+ high school participants over multiple rounds of competition

Skills

- Languages: C, Java, Python, SML, LATEX, HTML, CSS, Javascript, SQL
- Libraries/Frameworks: Bootstrap, Flask, jQuery, SQLAlchemy
- Tools: Bootstrap Studio, Adobe XD, Adobe Lightroom, Figma, GIMP