Ruiran Xun

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https://ruiran.me/

Education

- **Carnegie Mellon University** — Pittsburgh, PA
  B.Sc. Chemistry, Dual Degree in Computer Science — *May 2022*
  - <u>Previous courses:</u> Principles of Imperative Computation, Introduction to Computer Systems, Principles of Functional Programming, Great Ideas in Theoretical Computer Science
  - <u>Fall 2020 courses:</u> Parallel and Sequential Data Structures and Algorithms, Software Foundations of Security and Privacy, 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