

# Elizabeth Johnson

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## EDUCATION

**Pomona College**, Claremont, CA

Expected May 2024

B.A. Computer Science (3.94/4.00 GPA)

- Pomona College Scholar – top 25% of class (Spring '22, Fall '21, Fall '20)

### Relevant Coursework

- Computer Systems, Managing Complex Systems, Data Structures and Algorithms, Linear Algebra, Data Science, Statistics, Discrete Math, Functional Programming

## EXPERIENCE

### Software Developer

August 2022 – Present

Software Development Group, Associated Students of Pomona College (ASPC)

- Use Ruby on Rails to maintain ASPC website providing course & professor reviews, dining & housing information, online voting system to 5000+ students at the Claremont Colleges
- Contribute to team with 3 web developers, product manager, ASPC Senate & staff, on-campus clubs & organizations

### Research Assistant

May 2022 – Present

Autonomous Robotics and Complex Systems (ARCS) Lab, Pomona College

- Create high-fidelity environments in Unreal Engine for generating image data and to build image classification models
- Implemented set of custom commands to change lighting and material conditions during simulation

### Discrete Math and Functional Programming Teaching Assistant

January – May 2022

Pomona College Computer Science Department

- Hosted biweekly mentor sessions to 38 students for help in math/computing concepts, graded problem sets

### Katie Porter for Congress, Field Organizer Intern

March – Nov 2020

- Trained 200+ volunteers on phone bank software to make calls aimed at collecting voter data on policy positions, support of Rep. Porter, and increase voter turnout

## PROJECTS

### Sagehen Sprint (<https://tinyurl.com/sagehensprint>)

September 2021 – Present

- Used JavaScript, CSS, HTML to create an online web game of Pomona College's mascot, Cecil the Sagehen
- Implemented voice classifier with Teachable Machine to allow user to control game using voice commands, used Procreate to create original game graphics such as character animation and background

### Will Smith v. Chris Rock: Tweets from the 2022 Oscars

April – May 2022

- Conducted a sentiment analysis of four relevant Twitter topics using Twitter API, Natural Language Toolkit, Plotly, NumPy, and Pandas

### Identifying Intrinsically Disordered Proteins from Primary Sequences

January – May 2022

(<https://tinyurl.com/p-rotein>)

- Utilized Scikit-learn, NumPy, and Pandas to evaluate the performance of several deep learning architectures in classifying protein structure with 4 Claremont College students

## SKILLS

Programming Languages: Proficient in Python, Java, HTML, CSS; Experience in JavaScript, C/C++, R

Frameworks and Tools: Visual Studio Code, Git/ GitHub, Remote Development, Ruby on Rails, Unreal Engine, Eclipse, RStudio, Jupyter Notebook

## EXTRACURRICULARS

### Clubs

- Project Member at P-ai, a Machine Learning project-based organization at the Claremont Colleges
- Art Contributor for Associated Students of Pomona College, Chan Gallery at Pomona College, Agave Review, Asian American Resource Center
- Hobbies: road cycling, outdoor painting

### US Speed Skating

- 2018 US Olympic Trials – 14th & youngest qualifier nationally for Short Track Speed Skating
- 2020 Amateur Speed Skating Union Foundation- Winner of \$2,500 Medallion Scholarship
- 2x US Junior World Team Member, 2x Age Group Record Holder – Short Track & Long Track Speed Skating