

# Sion Avakian

[avakianssion at gmail dot com](mailto:avakianssion@gmail.com) | [linkedin.com/in/sion-avakian/](https://linkedin.com/in/sion-avakian/) | [github.com/avakianssion](https://github.com/avakianssion) |  
[avakianssion.github.io/avakianssion/](https://avakianssion.github.io/avakianssion/)

## EDUCATION

### University of California, Irvine

*Bachelor of Science in Computer Science, GPA: 3.5*

Irvine, CA

June 2019 – June 2021

### Glendale College

*Associate of Science in Mathematics, GPA: 3.7*

Glendale, CA

June 2016 – May 2019

## EXPERIENCE

### Software Engineer

July 2020 – Present

*Capgemini*

*Los Angeles, CA*

- Contributed to various stages of the clients' Software Development Life Cycle with an emphasis on quality engineering.
- Developed object oriented programs and scripts using Python and C# to reduce manual testing efforts and increase code quality.
- Collaborated with senior engineers in cross-functional and Agile teams to develop high quality code.

### Undergraduate Researcher

July 2020 – September 2020

*UC Irvine Institute for Money, Technology, and Financial Inclusion*

*Irvine, CA*

- Utilized various web scraping tools/techniques such as Selenium, Scrappy, and BeautifulSoup to gather relevant data under the supervision of UC Irvine Social Sciences Dean, Bill Maurer.
- Built and maintained twitter bots to serve as test subjects for how they contribute to the spread of dis- and misinformation.
- Co-authored a blog post published on The Consortium of Social Science Associations (COSSA), summarizing the modules and toolkits developed by the team and distributed to over 100 universities, governing associations, centers, and institutes.

### Undergraduate Researcher

September 2019 – June 2020

*National Science Foundation - UC Irvine Informatics and Data Science Lab*

*Irvine, CA*

- Presented findings to faculty concerning how community organizations use data to champion their cause and how this experience helped our team, as computer science students, to understand ethics in computer science.
- Performed case studies on non-profits and consolidated data into a database using File Maker Pro.
- Co-authored a scholarly publication regarding ethics in computer science curricula and undergraduate experiences.

### Software Engineer, Full Stack Intern

June 2018 – September 2018

*Youth Policy Institute*

*Los Angeles, CA*

- Sustained and improved organization's website working directly with the product manager and lead developer, resulting in a 15% increase in the number of fellows.
- Produced and maintained a follow-up system for current and past fellows using MERN stack.
- Adopted MongoDB for data storage.

## PROJECTS

### RSNA Pneumonia Detection

April 2021 – June 2021

*UC Irvine*

- Used Python, Numpy, PyTorch, and Sklearn to detect a visual signal for pneumonia in medical images.
- Utilized a large dataset of over 30,000 DICOM images.
- Accomplished over 85% validation accuracy on Kaggle's competition data.

### COVID-19 mRNA Vaccine Degradation Prediction

October 2020 – December 2020

*UC Irvine*

- Used Python, NumPy, Pandas, TensorFlow, Keras, and Sklearn to predict RNA molecules' likely degradation rates.
- Achieved maximal time efficiency with a combination of fast algorithms and quality hardware.
- Successfully completed the Kaggle competition with 80% prediction accuracy.

### Facing Digital Extremism in a Pandemic Modules/Tool-kits

July 2020 – September 2020

*UC Irvine*

- Scraped Twitter, Reddit, Facebook, and other social media platforms for relevant data.
- Developed modules and tool-kits, taught in undergraduate/graduate courses aimed to identify and combat misinformation.
- Promoted the modules and digital tool-kits through events and social media channels to over 30,000 UC Irvine students and faculty as well as other national organization.

### Phoenix Robotics

January 2019 – May 2019

*Glendale College*

- Utilized Arduino, Python, and Raspberry Pi to build a public service humanoid robot.
- Raised and managed north of 20,000 Dollars for the project.
- Organized and lead an agile work environment for more than 15 team members.

## SKILLS

**Programming:** Python, C#, C/C++, Swift, HTML/CSS, Selenium, Git, PyTorch, Pandas, NumPy

**Tools:** Xcode, Visual Studio, Jupyter Notebook, Vim, Agile frameworks

**Languages:** English, Armenian, Farsi (Persian)