

Sion Avakian

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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.
- Collaborated with senior engineers in cross-functional and agile teams to develop object-oriented programs and scripts using Python and C# to reduce manual testing efforts and increase code quality.
- Optimized SQL queries to improve efficiency and quality of 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, Selenium, SQL, HTML/CSS, PyTorch, Pandas, NumPy

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

Languages: English, Armenian, Farsi (Persian)