

Jacob Sommer

Dublin, CA | [linkedin.com/in/jsommer](https://www.linkedin.com/in/jsommer) | github.com/jsommer

EDUCATION

University of California, Irvine

Sep. 2021 – Present

B.S. Computer Science

Irvine, CA

- 3.87 GPA
- Expected Graduation: December 2024
- Relevant Coursework: Data Structures, Design & Analysis of Algorithms, Computer Organization, System Design, Machine Learning & Data-Mining, Data Management (SQL), Applied Cryptography, Beyond SQL Data Management (NoSQL)

WORK EXPERIENCE

Electric Power Research Institute (EPRI)

Palo Alto, CA

Student Software Developer

July 2024 – Present

- Provided technical support for EPRI Integrated Risk Technologies (IRT) software to customers.
- Fixed bugs and tested new features for IRT software (.NET/Visual Basic).
- Developed a Python script to automate entry of technical support email inquiries into a database, saving hours of manual entry.
- Developed a cross-platform GUI application with Python Tkinter for EPRI's Modular Accident Analysis Program, enabling users to efficiently manage and view statuses of runs of the program.

Student Software Developer

July 2023 – Sep. 2023

- Developed a Python application running on Jupyter Notebook for automating probabilistic risk assessment for nuclear power plants.
- Automatically calculated importance measures and identified safety-critical components under Nuclear Regulatory Commission guidelines, saving significant amounts of time compared to performing manually.
- Utilized in-house software for performing calculations and pandas for data analysis.

PROJECTS

PeterPortal | *Express, React, TypeScript, MongoDB, AWS*

Sep. 2023 – Present

Project Lead, Information and Computer Sciences Student Council

- Oversaw a team of 5-7 students in the development of PeterPortal, a web application to aid peers at University of California, Irvine with course discovery and planning.
- Features an improved course catalogue and a 4-year planner which are used by 3,000 monthly users.
- Facilitated planning, implementation, and review of team members's tasks through 2-week sprint cycles.

PlayPic | *React, Express*

Feb. 2022

Developer

- Collaborated with three teammates to develop a web application that takes an image and creates a Spotify playlist with a matching mood for the 36-hour HackUCI 2022 hackathon.
- Developed Express routes to compute the mood of an uploaded image based on the warmth/coolness and saturation of the colors in the image and handle Spotify OAuth logins.
- Interacted with Spotify's API to create a playlist of recommended songs matching the computed mood of the image.
- Implemented frontend routing with React Router.

Star Tracker | *Python*

Oct. 2019 – Nov. 2019

Personal Project

- Programmed, designed, and built an equatorial mount from scratch with common hardware store materials, a stepper motor, and a Raspberry Pi.
- Counts the Earth's rotation, allowing a camera to track and photograph nebulae, galaxies, and other deep sky objects through long exposures.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Java, Python, SQL, C/C++

Frameworks/Technologies: React, Express, Node.js, Jupyter Notebook, pandas, NumPy