

University of California, Berkeley

Berkeley, CA

Electrical Engineering and Computer Science, B.S.

Aug 2022 - May 2026

QUALIFICATIONS

[GPA: 3.6]

Skills:

NLP, Machine Learning, Web Development, Databases, Robotics, Computer Architecture, Transformers

Languages:

Java, Python, C, C++, JavaScript, MATLAB, R, SQL, RISC-V, VBA, HTML/CSS

Tools:

SpaCy, Docker, Flask, React, Nodejs, Git, Jupyter, Valgrind, Django, PyTorch, Arduino, NumPy, Pandas

PROFESSIONAL EXPERIENCE

RecVue

Palo Alto, CA

Software Engineer Intern

June - Aug 2024

- Collaborated on developing an AI-powered assistant leveraging SpaCy NER to convert natural language queries into SQL commands, improving query processing efficiency by 30%.
- Led engineering efforts to deploy the NLP model, utilizing Docker for containerization and Flask for RESTful API service creation. Implemented a system to interface with Oracle database, executing dynamically generated SQL commands for efficient customer data retrieval.
- Initiated development of a natural language generation system using large language models and Named Entity Recognition to translate database responses into human-readable format, enhancing customer query comprehension.

PROJECTS

CS61Classify

September 2024

- Developed RISC-V assembly code to implement handwritten digit classification using ReLU activation in a machine learning model.
- Designed and implemented a simple Artificial Neural Network (ANN) as part of the classification process, enhancing the accuracy and effectiveness of the digit recognition system.

Build Your Own World

November 2023

- Designed and developed a 2D interactive, tile-based exploration game engine using Java StdDraw and TileSet libraries.
- Implemented procedural generation techniques with seed-based algorithms to create diverse and randomly generated worlds with strategically placed keys and locks
- Created a robust Save/Load feature for an immersive user experience

S1XT33N

October 2023

- Engineered a voice-controlled robotic car using Arduino (C++) and signal processing.
- Implemented SVD and PCA algorithms for dimensionality reduction, noise reduction, and feature extraction.
- Integrated these algorithms into the circuit design to enable precise control mechanisms and enhance the car's responsiveness to voice commands.

Excel VBA automation

July 2023

- Engineered and deployed a macro system to efficiently manage high-volume customer data from an insurance gateway, streamlining data processing and reducing manual effort by 60%.
- Implemented real-time data conversion to a standardized format compatible with the Customer Relationship Management (CRM) system, enabling company-wide access to up-to-date information.
- Optimized data handling processes, significantly reducing error rates in large datasets and improving overall data quality and reliability.

EXTRACURRICULARS

FullStack Development | Web Development at Berkeley

April 2024

- Audi-Friends: Led front-end development (HTML/CSS) and contributed to back-end (Python/Django) for a social audio-book discovery platform. Integrated Spotify API for book searches and implemented real-time updates for user-generated reviews and recommendations.
- Noteworthy Website: Built a website for the on-campus a cappella group *Noteworthy* using JavaScript, HTML, and CSS, enhancing the group's online presence and user engagement.
- Personal Website: Created *rianpuri.github.io* to showcase my personal interests and provide more information about myself.