

Eric S. Lee

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EDUCATION

University of Pennsylvania School of Engineering and Applied Science (Clark Scholar) May 2026
• Master's of Science in Engineering in Computer Science (MSE) GPA: 4.00/4.00
• Bachelor's of Science in Engineering in Computer Science (BSE) GPA: 3.96/4.00
Relevant Coursework: Operating Systems; Advanced Algorithms; Data Structures and Algorithms; Big Data Analytics; Programming Languages and Techniques;
Honors & Awards: Employee of the Month at Southern California Edison, 2022 Edison Scholar, 1st Place Congressional App Challenge 45th District, 1st Place Merge (Hack+Policy Thon), 1st Place Cal Poly Pomona Programming Contest

WORK EXPERIENCE

Data Science Intern May 2024 - August 2024
Southern California Edison | Pomona, California
• Saved 100 hours each month by developing a Large Language Model with 98% accuracy in extracting answers to questions from email bodies, leveraging Google Cloud Platform, Power Apps, and Python to create an automated data pipeline script.
• Improved the performance of existing machine learning models for predicting underground equipment failure by identifying and addressing imbalanced data issues, leading to a 88% prediction accuracy. Implemented ensemble techniques such as XGboost and Random Forest

Data Engineering Intern May 2023 - August 2023
Southern California Edison | Pomona, California
• Automated a 45-minute monthly task, reducing it to 20 seconds, and optimized daily data refreshes from an hour to 10 seconds using Python and Power Automate. Transitioned over 500 gigabytes of data from MS Access into SAP HANA, making the entire process take 1% of the original execution time
• Generated historical data marts with hundreds of relational tables. Built 3 data metrics with Power BI and SAS Viya and met with stakeholders daily to discuss needs

Co-Founder / Full Stack May 2020 – July 2023
Fundsy LLC | Irvine, California
• Developed full stack app providing ACH/Wire, debit card, checks, custom campaign, and fiscal sponsorship for nonprofits.
• Engineered UI/UX and integrated backend with Firebase for data storage and React Native for frontend of iOS and Android. Founded with a team of 3.
• Processed over \$110,000 of transactions for over 100 domestic and international registered nonprofits.

EXTRACURRICULAR ACTIVITIES

Computer Systems Teaching Assistant April 2024– Present
University of Pennsylvania | Philadelphia, Pennsylvania
• Conducted weekly office hours, assisting over 50 students with debugging issues in C and understanding low-level computer systems concepts such as memory management and CPU architecture
• Led bi-weekly recitations for 30 students to review core topics like memory hierarchy and CPU operations

Product Manager and Software Engineer January 2024– Present
Penn Spark | Philadelphia, Pennsylvania
• Managing a team of 8 designers and developers to ensure punctual delivery of web applications to clients.
• Developing web applications using react.js for clients ranging from startups to established non-profits

PROJECTS

PennOS Jan 2024 - Present
• Built a user-level UNIX-like operating system from scratch using C. Handles round-robin scheduling of threads, multithreading, thread safety, shell operations, and its own file system using File Allocation Table

Fraudulent Credit Card Transaction Detector September 2023 - December 2023
• Developed machine learning model in PyTorch, achieving 96% accuracy using Random Forest and XGBoost, coupled with extensive data cleaning and PCA for feature optimization. Prioritized high-amount transactions

Edufy August 2023 - September 2023
• Executed a full stack natural language processing application that converts class lecture recordings into practice problems, notes, and flash cards. Incorporated speech-to-text transcription and a large language model (GPT 3.5 Turbo) to auto-generate study materials. Developed backend using Django Rest Framework and frontend with React.

TECHNICAL SKILLS

Programming Languages: Java, Linux, SQL, Python, C++, C, Assembly, React, React Native, TypeScript, JavaScript, OCaml
Platforms/Tools: PyTorch, AWS, Docker, Django, SAS, Redux, NextJS, Postgres, Firebase, Power BI, Power Automate