Eric S. Lee

ericclee@seas.upenn.edu | (949) 892-7396 | Portfolio: https://ericslee.dev/

EDUCATION

University of Pennsylvania School of Engineering and Applied Science (Clark Scholar) *December 2026*
- Bachelor of Science in Engineering, Computer Science GPA: 3.96/4.00
- Accelerated Master of Engineering, Computer Science GPA: 4.00/4.00

***Relevant Coursework*:** Operating Systems; Advanced Algorithms; Data Structures and Algorithms; Big Data Analytics

***Honors & Awards*:** 2022 Edison Scholar, 1st Place Congressional App Challenge 45th District

WORK EXPERIENCE

Incoming Software Development Engineer Intern *May 2025 - August 2025*
Amazon.com, Inc. | *Seattle, Washington*
- People Experience and Technology Team

Software Engineer Intern *January 2025 - May 2025*
National Aeronautics and Space Administration (NASA) | *Houston, Texas*
- Co-authored a NASA technical paper on integrating a physics-based neural network into VIPER's MagicDraw thermal model. Engineered an MBSE digital twin of VIPER through real-time simulation.
- Streamed live sensor data with <1s latency using multithreading and ensured thread safety with mutex locks.
- Programmed a React + Flask web application that enables intuitive navigation and inspection of ReqIF (XML) files, reducing manual review time by ~1 hour for system engineers across NASA

Software Engineer Intern *May 2024 - August 2024*
Southern California Edison | *Pomona, California*
- Saved 100 hours per month by developing a 98% accuracy Large Language Model that extracted answers to questions from email bodies. Leveraged 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 to 88% by addressing imbalanced data issues. Implemented ensemble techniques like XGBoost and Random Forest

Computer Systems Teaching Assistant *April 2024– Present*
University of Pennsylvania | *Philadelphia, Pennsylvania*
- Conducting weekly office hours for over 50 undergraduate UPenn students for debugging issues in C and understanding memory management, CPU architecture, firmware design, and concurrency
- Leading bi-weekly teaching sessions for 30+ students to answer conceptual questions and review low-level system design

Data Engineer Intern *May 2023 - August 2023*
Southern California Edison | *Pomona, California*
- Automated 45-minute monthly task to 20 seconds. Optimized daily data refreshes from 1 hour to 10 seconds using Python and Power Automate. Constructed data ETL pipeline to transition 500 gigabytes of data from MS Access to SAP HANA
- Produced historical data marts with 300 relational tables by data mining to build 3 data visualization dashboards with Power BI and SAS that are used by 10,000+ corporate stakeholders

EXTRACURRICULAR ACTIVITIES

Product Manager *January 2024– Present*
Penn Spark | *Philadelphia, Pennsylvania*
- Leading a team of 8 designers and developers to build a Django-React Native mobile app for UPenn students to post and vote on polls. Used by 100+ users and increased speed of database API calls by 70% using lazy updates
- Instituting weekly sprints and executing team-building exercises to improve team collaboration

Co-Founder / Full Stack *May 2020 – July 2023*
Fundsy LLC | *Irvine, California*
- Engineered a platform for nonprofits offering features like direct debit, wire transfers, and fiscal sponsorship using Firebase and React Native; enhanced user engagement resulting in 300 new sign-ups within the first quarter post-launch.
- Processed over $110,000 of transactions for over 100 domestic and international registered nonprofits

PROJECTS

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

TECHNICAL SKILLS

Programming Languages: Java, SQL, Python, C++, C, C#, Ruby, React, JavaScript, TypeScript, OCaml, HTML/CSS
Platforms/Tools: PyTorch, Linux, Node.js, MongoDB, AWS, Docker, Django, MySQL, NextJS, Postgres, Firebase, Power BI, Git