Stacey Toh

6265585452 | stoh1@berkeley.edu | Berkeley, CA

Education

University of California, Berkeley
B.S in Electrical Engineering and Computer Science | 08/2025

- Relevant coursework: Circuit Design, Control, Signal Processing, Machine Architecture, Memory Management, Operating Systems, Computer Logic Design, Cryptography
- Languages: C++, Java, Python, C, RISC V, HTML, and Scheme

Pasadena City College
Electrical Engineering | 05/2023

- GPA: 3.90/4.00
- Honors: Dean's Honor List (4/4 semesters)
- Relevant coursework: Dynamic Data structures, Website Development, Robotics, Algorithm design

Experience

ClinicianAI | Remote
Machine Learning Engineer | 06/2024 - 08/2024

- Developed a data pipeline using Python, BeautifulSoup, and NumPy to automate dataset extraction and structuring for model training.
- Implemented machine learning models using frameworks like LLaMA2 and TensorFlow, incorporating NLP techniques and hyperparameter tuning to enhance the accuracy and relevance.
- Deployed and maintained models on cloud platforms (AWS/Azure), ensuring real-time performance and scalability, while integrating CI/CD pipelines for continuous model updates and improvements.

Caltech University
Research Fellow | 02/2023 - 05/2023

- Investigated photon-based computing that utilizes thin-film lithium niobate within Caltech's Marandi Group.
- Enhanced system architecture efficiency by analyzing CUDA's role in NVIDIA GPUs and optimizing the balance between throughput and latency.
- Designed and built a high-performance gaming PC within a $250 budget, increasing system performance by 20% through targeted overclocking and hardware optimization.

Pasadena City College
Mathematics Tutor | 12/2022 - 05/2023

- Expertise in calculus, trigonometry, differential equations, and linear algebra.
- Developed personalized study plans to address individual learning needs.
- Proficient in LaTeX for advanced mathematical modeling and document preparation.

Pt Asiapacific True Trust | Jakarta
Website Developer | 05/2021 - 08/2021

- Assisted in the creation of a reactive web application that reduced offline marketing costs by 30%.
- Worked closely with UX/UI designers to translate visual concepts into functional online experiences.
- Quickly adapted to web development trends, integrating technologies such as React.js and Node.js into projects.

Projects

Self-Driving Car with Voice Command Navigation

- Engineered a self-driving car capable of responding to voice commands and executing precise navigation paths using Arduino.
- Integrated analog-to-digital and digital-to-analog converters, alongside motor control and encoder circuits, to enable real-time motion tracking and control.
- Developed a speech pattern classifier using SVD and PCA, allowing the car to distinguish and act on different voice commands despite hardware limitations.