AMANDA PIYAPANEE

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Education

California Institute of Technology (Caltech) **3.8/4.0** GPA
Bachelor's of Computer Science and Business, Economics & Management Graduating 2023
Relevant Coursework: Algorithms, Machine Learning (**Python**), Software Design **(C)**, Data Structures (**Java**), Computing Systems (**C**),

Work Experiences

Software Engineering Intern *June 2021 - Sept 2021*
Salesforce Inc.

Implemented new architecture with relational databases to optimize data processing for GBs of data in Bulk API 2.0 (REST API) in **Java** and **SQL** to production. As a part of the Enterprise API Team, I worked with a complex legacy codebase, wrote thorough unit & functional tests, pair programmed remotely with an engineering mentor, and used Agile for weekly updates

Researcher *March 2021 - Aug 2021*
Caltech (Claire Ralph and Hillary Mushkin)

Developed a high-level framework for machine learning engineers to account for personal bias in speculative algorithm design in student research team. Currently developing a research paper to present at conferences

Data Science Research Fellow *June 2020 - Aug 2020*
Caltech (Division of Biological Engineering, Wagenaar Lab)

Created data visualizations, developed ML models, and cleaned data in **Python** and **SQL** to contribute to a database of leech data and a computational model of a nervous system (Perpall Semi-finalist - research presentation competition)

Projects

Caltech Robotics: Developed an ML depth estimator using a GAN (generative adversarial network) in **Python**

Pinball (General Physics Simulator): Developed pinball game end-to-end in **C** with team. Developed physics simulator from classical mechanics formulae, front-end interface, and tests for accuracy of formulae

Twitter Client: Developed app to interact with Twitter in **Swift** and the Twitter API

Official Caltech Website: Hired by Caltech to develop the official Physics 2a course website

Skills

Programming	Java, Python, C, SQL, Swift, Matlab, OCaml
Common Data Libraries	Pytorch, scikit-learn, pandas, Matplotlib, Numpy, TensorFlow
Software Tools	Git, Linux, Agile, Jupyter Notebook, Vim, Figma, Adobe Suite, Mathematica, LaTeX

Leadership & Honors

Microsoft Tech Resilience Mentoring Program *March 2021 - April 2021*
Discussed with 2 engineering mentors about industry best practices in software with an emphasis on mental health

Board of Directors (Fair Bytes - AI Education nonprofit) *March 2021 - Current*
Currently managing interview series with professionals in AI. Advancing AI education through online content

President (Datamatch @ Caltech) *Dec 2020 - Current*
Founded, promoted, troubleshot, and organized a virtual matchmaking platform for Caltech undergrads to meet undergrads at Caltech and UCLA. Achieved participation rate of over 50% of Caltech undergraduate students in 1st year of release

Co-President (Techreach) *Sept 2020 - Current*
Interviewed Google AI Senior Research Scientist Emily Denton. Organized and hosted zine-making workshop. Exploring the societal impacts of technology through workshops, community discussions, and partnerships with local orgs

Hackathon Organizer (Hacktech) *Nov 2020 - March 2020*
Invited speaker & hosted Director of NASA JPL Larry James. Reviewed 250+ applicants. Improved Hacker Experience

4th Place Electronic Trading Competition (Jane Street Los Angeles ETC) *Nov 2019*
Developed a linear regression perceptron in **Java** to maximize profits on a stock market (arbitrage strategy)