Jeremy Li

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Education

Carnegie Mellon University May 2025

Bachelor of Science in Machine Learning, Minors in AI and Business Analytics *Pittsburgh, PA*

- Relevant Coursework: Computer Vision, Data Engineering, Data Mining, Data Structures & Algorithms, Deep Learning, Natural Language Processing, Optimization, Probability, Statistical Regression, Time Series Analysis
- Leaderships/Awards: Data Science Club Vice President, LFE Chair, Quantitative Social Science Scholar, Google Developer Student Club Core, High Honors Dean's List, JPMorgan Chase Data For Good Runner-Up

Experience

LivaNova May 2024 – Aug 2024

Data Science Intern *Pittsburgh, PA*

- Designed a web scraping algorithm, automating weekly email summaries for stakeholders on competitor markets
- Analyzed adoption factors for LivaNova epilepsy devices, enhancing patient targeting and boosting Q4 2024 sales
- Developed models identifying 150,000+ at-risk epilepsy patients, enabling timely physician targeting and outreach
- Migrated large-scale data to Azure with Spark, improving retrieval speed and analysis time by 120%

Moderna Therapeutics May 2023 – Aug 2023

Machine Learning Engineer Intern *Cambridge, MA*

- Created software to pretrain, train, and fine-tune large models with PyTorch on 1M+ employee survey data
- Implemented an NLP pipeline with cloud integration, enhancing analysis accuracy and increasing efficiency by 40%
- Engineered models to transform datasets into actionable dashboards, driving strategic decisions for the HR team

CMU Machine Learning Department Jun 2022 – Present

Teaching Assistant *Pittsburgh, PA*

- Lead weekly labs and office hours, teaching statistics and data science concepts to over 100 students
- Mentor 12 groups through machine learning research projects, from proposal to implementation and analysis

CMU Neuroscience Institute Jan 2022 – Dec 2022

Data Analyst Intern *Pittsburgh, PA*

- Researched on early childhood behavior and neuroimaging, contributing data analysis to 3 publications
- Created interactive dashboards and improved data processes, improving accessibility by 30% across 15 datasets
- Conducted statistical analyses to identify key patterns, leading to actionable insights that informed research

Projects

Computer Vision Card Detection | *CV, TensorFlow, OpenCV* Aug 2024

- Developed a poker card detection model using YOLO, achieving high accuracy in identifying cards
- Utilized Python and OpenCV for seamless integration of video capture, card detection, and real-time analysis

Texas Hold'em Poker Odds Calculator | *Pandas, NumPy, Probability, Optimization* May 2024

- Built a poker odds calculator using Monte Carlo simulations for up to 9-player Texas Hold'em
- Optimized simulation algorithms to run millions of iterations per hand, providing real-time insights
- Designed a user-friendly interface for smooth display of calculated winning probabilities from pre-flop to river

Clickbait Detection System | *NLP, BERT Model, Hugging Face* Jan 2024

- Developed a machine learning model to detect clickbait headlines, achieving over 85% accuracy
- Fine-tuned a BERT model and optimized performance by configuring hidden layers, batch sizes, and epochs
- Deployed the model on Hugging Face, enabling broader accessibility and integration into digital media platforms

Airbnb Tourist Guide for New York City | *Data Visualization, SQL* Mar 2023

- Analyzed over 50,000 Airbnb listings using Altair to uncover market trends and data-driven strategies
- Created interactive visualizations to provide users with clear insights into NYC's Airbnb market dynamics

Technical Skills

Languages: Python, SQL, R, Java, JavaScript, C
Developer Tools: AWS, Databricks, Google Cloud Platform, Microsoft Azure, MongoDB, Salesforce, Snowflake
Data Science: A/B Testing, Advanced Analytics, BigQuery, Business Intelligence, Cloud Computing, Data Analytics, Database Management, Data Modeling, Hadoop, Mathematics, Power BI, Tableau