STEPHEN WANG

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[Personal Website](#) · **[Github](#)** · **[LinkedIn](#)**

EDUCATION

Dartmouth College, Hanover, NH　　　　　　　　　　　　　　　　　**Sep 2020 - Jun 2024**
Bachelor of Arts, Double Major in Computer Science and Economics　　　　　　**GPA 3.76/4.00**
Coursework: Machine Learning, Deep Learning, Statistics, Data Visualization, Discrete Math, Linear Algebra, Software Design and Implementation, Artificial Intelligence, Algorithms and Data Structures, Full-Stack Web Development, Object-Oriented Programming

University of Illinois Urbana-Champaign, Champaign, IL　　　　　　　**Incoming May 2025**
Master of Computer Science (Focus in Data Science)

WORK EXPERIENCE

Appian　　　　　　　　　　　　　　　　　　　　　　　　　　**Jan 2025 - Apr 2025**
Software Development Consultant
- Develop and deploy **full-stack** application in **Appian** for a leading mortgage financing firm, enhancing margin call processing efficiency by 20% and automated 40% of tasks required of associates
- Collaborate with product owners, architects, and UX teams to construct data models, build integrations with investment **APIs,** and create intuitive dashboard interfaces showing critical KPIs

TradeStation　　　　　　　　　　　　　　　　　　　　　　　**Jun 2023 - Aug 2023**
Data Engineer Intern
- Designed pipeline to aggregate attrition data on 200K+ accounts from **Databricks** into **AWS** S3 buckets
- Created automated scripts using **Python** and **SQL** to detect 99.5% of account anomalies in 2023 based on accounting rules and exceptions resulting from 24-7 cryptocurrency trading
- Devised rule notebook to fix 78% of account anomalies in 2023, saving time for financial managers

U.S. Army Corps of Engineers　　　　　　　　　　　　　　　　**Jun 2021 - Jun 2022**
Machine Learning Intern
- Co-authored the research paper *"Synthetic CFD Estimation for Blackhawk Airfoil Drag Coefficient"*
- Designed ensemble deep learning and gradient-boosting models using **Python**, **Tensorflow**, **XGBoost**, **LightGBM**, and **scikit-learn** to reduce error in key rotorcraft performance metric predictions by over 90%
- Automated testing of over 1.5K neural network configurations using **Optuna** and **KerasTuner**
- Work featured in laboratory research symposium and RD 2022 conference reaching over 600 attendees

PROJECTS

Harmonize　　　　　　　　　　　　　　　　　　　　　　　　**May 2024 - Jun 2024**
Full Stack Engineer
- Developed frontend and backend of application that combines Spotify and Instagram, turning music-sharing into a more social activity using **React, Javascript, Node.js, Express, Zustand, MongoDB** and Spotify **API**

Opportune　　　　　　　　　　　　　　　　　　　　　　　　**Sep 2023 - Mar 2024**
Frontend Engineer
- Developed entire frontend of team-matching and project management application for new hires using **React, Remix, Typescript, HTML/CSS,** and seamlessly wired data from backend using **Axios** and **MongoDB**

Predictive Modeling of U.S. Retail Sales　　　　　　　　　　　　　　　**May 2022**
- Conducted exploratory data analysis and visualizations on retail sales data using **Python, seaborn, matplotlib,** and **scikit-learn,** uncovering profitable items and revenue trends across various product categories and states
- Developed predictive models using **CatBoost** (gradient-boosting decision trees), achieving over 99% accuracy in determining transaction profitability and product sub-categories, and $R^2 > 0.99$ for discount percentages

SKILLS & INTERESTS

Proficient: Python · SQL · Tensorflow · Pytorch · R · HTML/CSS · Javascript · React · Java · NLP · Bash · Git
Familiar: ETL · Data Modeling · Airflow · Databricks · Docker · AWS · PowerBI · PySpark · Tableau · MongoDB
Interests: Piano · Music Composition · Photography · Tennis · Skiing