Sophia Tu

(917) 207-5506 | sophiatu217@gmail.com
2 Columbus Ave, New York, NY 10023

EDUCATION

Brown University | *Bachelor of Science in Computer Science-Economics*   **GPA: 3.9/4.0 | May 2023**
Coursework: Corporate Finance, Investments I, Mathematical Econometrics I, Computer Vision, Deep Learning

WORK EXPERIENCE

EY-Parthenon   **New York, NY**
Associate – Software Strategy Group   Feb. 2024 – Present

User Feedback Benchmarking Dashboard
- Led end-to-end development of a Power BI benchmarking dashboard that aggregated historical survey data, converting firmographics and key metrics into actionable insights for stakeholders; saved firm $180,000+ by reducing redundant work
- Collaborated across 3 teams to design a workflow that automates data extraction, cleaning, and transformation
- Conducted user testing and collected feedback to optimize functionality and user experience, increasing adoption by 40%
- Managed timelines and resources to deliver a minimum viable product in 2 weeks, meeting performance and scalability goals

Commercial Diligence on Cybersecurity Company with ~$450m revenue
- Led team of 3 consultants to develop a comprehensive market sizing model segmented by product across core geographies
- Synthesized data from market reports and ~40 expert and customer calls to present a recommended GTM strategy, pinpointing high-potential geographies and customer profiles for new logo acquisition and cross-sell/upsell

Technical Diligence on E-Prescription Company with ~$90m revenue
- Worked with management to analyze operational efficiencies, technical maturity, and potential integration challenges
- Constructed comprehensive R&D org. chart in Excel using employee census to identify key roles and gaps in staffing
- Calculated tenure, compensation, and attrition metrics using internal company documents to assess workforce stability
- Projected hosting hardware costs using limited financial data, accounting for planned migration to AWS

Survey Center of Excellence
- Created user-friendly, dynamic Excel model to identify inconsistent survey responses, significantly improving data quality and cutting data cleaning/update times by 75% for onshore and offshore teams
- Developed Python script to flag discrepancies in large datasets with user prompts that enabled non-technical team members to adjust filtering criteria and key columns, resulting in a 60% increase in adoption and detection of 2,500+ invalid entries

Inspirit AI   **New York, NY**
Instructor   July 2023 – Jan. 2024
- Taught classes of 5-6 high school students about fundamental AI/ML concepts using Python and TensorFlow, guiding them in building and presenting CNN models to peers and parents at the end of each 10-day program
- Instructed a class of 17 elementary school students in Scratch programing at the United Nations International School's afterschool program for 3 months; adapted online curriculum to accommodate for in-person learning and shortened class time

William Blair   **Charlotte, NC**
Investment Banking Summer Analyst – Industrial Growth Products   June 2022 – Aug. 2022
- Updated tracker of 1000+ due diligence requests and 50+ diligence calls for 9 buyers to aid in analyses of client's business
- Used VBA, Word, Excel and PowerPoint to create logistics letters and buyer dossiers for management presentation attendees
- Assisted in building a 3-statement model to forecast future cash flows for company valuation

SELECTED PROJECTS

Trading Bot *(https://github.com/sophiatu2/trader-joes)*   **Aug. 2024 – Present**
- Deployed a trading bot in Python on Google Cloud to analyze historical stock data and automate trades through Alpaca
- Implemented back testing and Matplotlib visualizations to optimize performance, achieving 30% return over the past year

Brown Space Engineering Mobile App *(https://github.com/BrownSpaceEngineering/pvdx-mobile-app)*   **Sept. 2020 – May 2023**
- Designed open-source low-cost cube satellite with team leads for testing next-generation perovskite solar cells in orbit
- Led Ground Software team of 3-4 students to draft and implement a React Native mobile app to interface with cube satellite
- Drove recruiting and created onboarding materials, ensuring smooth knowledge transfer and quick ramp-up for new members

Gesture Control System for Music Player *(https://github.com/sophiatu2/television)*   **Jan. 2021 – May 2021**
- Built CNN model in Python with TensorFlow for gesture-based music control, improving convenience and accessibility
- Optimized model performance and visualized training metrics using TensorBoard in Google Cloud Platform

SKILLS & INTERESTS

*Technical***:** Python, React, SQL, Docker, Google Cloud Platform, Excel, Powerpoint, Word, Power BI, CapitalIQ
*Language***:** Native Mandarin, Conversational Spanish
*Interests***:** Training for NYC marathon, PADI certified scuba diver, pencil/ink drawing, hiking, Beli, skiing/snowboarding enthusiast