

# Sophia Tu

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## 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, UI/UX

## WORK EXPERIENCE

### EY-Parthenon

Associate – Software Strategy Group

**New York, NY**

Feb 2024 – Present

#### *User Feedback Benchmarking Dashboard*

- Saved firm \$180,000+ by leading the end-to-end development of a Power BI benchmarking dashboard across 3 teams to aggregate historical diligence data, converting firmographics and key metrics into actionable insights for future diligences
- Reduced time to update by 4x by designing a workflow that automates data extraction, cleaning, and transformation
- Increased adoption by 40% by conducting user testing and collecting feedback to optimize functionality and user experience
- Delivered a minimum viable product in 2 weeks by managing timelines and ensuring future scalability

#### *Commercial Diligence on Cybersecurity Company with ~\$450m revenue*

- Led team of 4 consultants to develop a comprehensive market sizing model segmented by product across core geographies
- Proposed a new GTM strategy to elevate revenue growth from 8% to 18% over 5 years by identifying high-potential geographies and customer profiles for acquisition and cross-sell/upsell using market reports and ~40 interviews

#### *Technical Diligence on E-Prescription Company with ~\$90m revenue*

- Worked with management to analyze operational efficiencies, technical maturity, and potential integration challenges
- Identified key roles and gaps in staffing by constructing a comprehensive R&D org. chart in Excel using the employee census
- Assessed workforce stability by calculating tenure, compensation, and attrition metrics using internal company documents
- Projected hosting hardware costs using limited financial data, accounting for planned migration to AWS

#### *Survey Center of Excellence*

- Improved data quality and reduced data cleaning/update times by 75% for onshore and offshore teams by developing a user-friendly, dynamic Excel model to identify inconsistent survey responses
- Detected 2,500+ inconsistent data entries by coding a Python script to flag discrepancies in large datasets; Increased adoption by 60% by implementing user prompts, enabling non-technical team members to adjust filtering criteria and key columns

### Inspirit AI

Instructor

**New York, NY**

Jul 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 programming 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

Investment Banking Summer Analyst – Industrial Growth Products

**Charlotte, NC**

Jun 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
- Created logistics letters and buyer dossiers for management presentation attendees using VBA, Word, Excel and PowerPoint
- Forecasted future cash flows for company valuation by building a 3-statement model

## 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>)

**Sep 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**

- Enhanced interface accessibility by developing a gesture control system powered by a Convolutional Neural Network
- Attained a 99.6% accuracy by optimizing model parameters and visualizing metrics using TensorBoard in GCP

## SKILLS & INTERESTS

**Technical:** Python, TensorFlow, React, SQL, Google Cloud Platform, Excel, PowerPoint, Word, Power BI, CapitalIQ, Qualtrics

**Language:** Native Mandarin, Conversational Spanish

**Interests:** Training for NYC marathon 2025, PADI-certified scuba diver, digital/ink art, hiking, Beli, skiing/snowboarding enthusiast