

Yucheng Shao

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Education

University of Pennsylvania – Philadelphia, PA

GPA: 3.97/4.0

B.S.E. in Computer & Information Science; Minor in Mathematics; Minor in Economics

Sept 2023 - May 2027

- **University Scholars:** Selected among 120 students for Penn's flagship undergraduate research program, recognized for academic excellence, intellectual curiosity, and commitment to independent research.
- **PennApps Hackathon Board:** Leading visual design and branding for the 2025 PennApps hackathon; overseeing website design and creative direction.
- **IMC x Wharton Undergraduate Finance Club Trading Competition:** First Place, Portfolio Optimization
- **Wharton Asia Investments (Quant Global Macro):** 2023 FACT Capital Stock Pitch Competition Finalist
- **Relevant Coursework:** Algorithms & Data Structures, Databases, Operating Systems, Applied Machine Learning, Big Data Analytics, Software Foundations, Computer Architecture, UI/UX Design, Product Management

Winston Churchill High School – Potomac, MD

Unweighted GPA: 4.0/4.0; Weighted GPA: 4.97/4.0

Sept 2019 - May 2023

Experience

Global Technology Intern – Broadridge Financial Solutions

June 2025 - Aug 2025

- Developing an NLP pipeline using Python to automate XBRL field tagging in SEC filing documents
- Enhancing Code N Doc, a generative AI tool, by implementing a Model Context Protocol system to extract data from Confluence; integrating with frontend and backend using React and Node.js
- Redesigning the SEC filing web interface to match Broadridge's design system using React and Java

Research Intern in the Weber Lab – University of Pennsylvania

May 2024 - Present

- Developed machine learning models using Pytorch to predict p-waves in brain state data during REM sleep in mice
- Built Convolutional (CNN) and Long Short-Term Memory (LSTM) neural networks from scratch
- Achieved 98% accuracy with an LSTM model and 95% accuracy (RMSE) with a CNN model using 60+ features
- Generated augmented data; visualized predicted waveforms, accuracy, & loss using Matplotlib

Research under Prof. Charles Yang – University of Pennsylvania

May 2024 - Oct 2024

- Developed an algorithm using Python to mimic how children exercise pattern recognition using the Abductive Discovery of Productivity (ADP) and the Tolerance Principle (TP)
- Built a recursive decision tree-based algorithm that dynamically resizes based on user input

CIS 1200 TA (Programming Languages and Techniques) – University of Pennsylvania

Jan 2024 - Present

- Teach OCaml, Java, & program design concepts, including functional programming, GUI, & interfaces
- Lead weekly recitation review for 20+ students and office hours for 350+ students
- Develop weekly recitation materials for 50+ TAs including interactive slides & worksheets

Skills & Interests

Programming Languages: Python, Java, React, Node.js, OCaml, C, Javascript, HTML/CSS, SQL, RISC-V, MATLAB, LaTeX

Frameworks/Libraries: Pytorch, Scikit Learn, Tensorflow, Raspberry Pi, Regex, Github, Pandas, Matplotlib

Languages: English (native proficiency), Chinese (native proficiency), Spanish (professional fluency)

Extracurriculars: Theta Tau (Engineering Fraternity) Public Relations Chair, Bubble Bees Crochet Shop (Co-founder)