

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
- **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

Technical Experience & Projects

Global Technology Intern – Broadridge Financial Solutions

June 2025 - Aug 2025

- Building an NLP pipeline in Python to automate XBRL field tagging in SEC filings
- Integrating a Model Context Protocol (MCP) system to extract structured Confluence data for a generative AI tool; connecting backend APIs (Node.js) with a React frontend
- Redesigning the SEC filing web interface to match Broadridge's design system using React and Java

Horse Racing Application – CIS 5500: Databases

May 2025

- Built a full-stack web app to analyze 4M+ horse records using React, Node.js, and PostgreSQL on AWS RDS; applied Python regex for data cleaning and designed normalized schemas
- Wrote optimized SQL queries to identify top trainer-jockey pairs and surface horses outperforming market odds

Research Intern in the Weber Lab – University of Pennsylvania

May 2024 - Present

- Developed deep learning models in PyTorch to predict p-waves during REM sleep; achieved 98% classification accuracy with Long Short Term-Memory (LSTM) neural network and 0.05 RMSE with CNN using 60+ features
- Augmented training data and visualized waveforms and performance metrics with Matplotlib

AirBnB Finder – CIS 5450: Big Data Analytics

December 2024

- Built ML models (XGBoost, Random Forest, Linear Regression) with PyTorch and Scikit-learn to predict prices from 200K+ Airbnb listings based on 10+ features
- Engineered features, tested hypotheses, & tuned hyperparameters; visualized insights with Matplotlib and Seaborn

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

Jan 2024 - Present

- Lead weekly recitations (20+ students) and office hours (350+ students) for an OCaml- and Java-based course on functional programming & software design; Create review materials and guided assignments for 50+ TAs

Skills

Programming Languages: Python, Java, JavaScript, SQL, C, OCaml, HTML/CSS

Frameworks & Tools: React, Node.js, PyTorch, TensorFlow, Scikit-learn, Pandas, Git, Regex

Leadership & Achievements

PennApps Hackathon Board – Leading visual design and event branding for the 2025 PennApps hackathon

First Place, IMC x Wharton Undergraduate Finance Club Trading Competition – Portfolio Optimization

Finalist, 2023 FACT Capital Stock Pitch Competition – Wharton Asia Investments (Quant Global Macro)

Extracurriculars – Public Relations Chair, Theta Tau Engineering Fraternity; Co-founder, Bubble Bees Crochet Shop