# Theodore Xiong

Philadelphia, PA | tyxiong2@illinois.edu | 215-951-3838 | github.com/TheoXiong7 | linkedin.com/in/theoxiong/

## EDUCATION

**University of Illinois at Urbana-Champaign | Champaign, IL** **Expected Graduation: May 2026**

*B.S. Computer Engineering*

**Relevant Coursework**: Computer Systems & Programming, Computer Systems Engineering, Data Structures, Intro to Algorithms & Models, Applied Machine Learning, Analog Signal Processing, Digital Systems, Computing and Data Analysis

## WORK EXPERIENCE

**UIUC Technology Services | Champaign, IL** **August 2024 - Current**

*Student IT Consultant*

- Provide technical counsel regarding university technology for students, faculty and alumnus, while maintaining a 98.6% satisfaction rate from clients and contributing to the department overall >95% satisfaction
- Demonstrate exceptional client interaction skills and technical competency by offering clear and targeted technical solutions, contributing to increased efficiency within the IT department

**Outlier AI | Remote** **April 2024 - November 2024**

*Coding Expertise for AI Training*

- Evaluate the coherence and accuracy of Python code created by generative large language models, identifying areas for improvement and providing comprehensive feedback to the development team
- Write clean, optimized and documented code in Python for LLM style prompts to facilitate the iterative refinement of LLMs' coding ability, resulting in a 12.4% mean performance increase across 8 projects.

## PROJECT HIGHLIGHTS

**Algorithmic Trading in Python** (python, pandas, numpy, API integration)

- Built a Python-based trading engine incorporating adaptive EMAs, MACDs, dynamic stop losses and position sizing, and tiered profit targets that automatically adjust to different volatility and volume regimes
- Designed and deployed a comprehensive backtesting and live trading framework with an automated parameter optimizer utilizing grid search and data-driven performance metrics
- Achieved a mean 1Y Sharpe ratio of 1.24, 2Y Sharpe ratio of 1.28, and mean 1Y/2Y returns of 37.2%/70.8% in simulated backtests, validated by 7.3% returns over a 3-month live deployment using Alpaca API

**www.RISC-VIEW.com** (python, flask, react, tailwind)

- Built a lightweight RISC-V ISA lookup website using Flask, React and Tailwind that allows users to efficiently lookup and reference RISC-V Base ISAs and extension sets while filtering instructions by category. Simplified the process of looking up RISC-V instructions for ECE 391 students.
- Garnered 4,200+ clicks and 180+ users within 2-months of deployment while iterating through 3 versions of user interface, improving user experience through each iteration.

**Poker Tracker Web-app** (python, flask, react, tailwind, pandas, numpy)

- Designed a poker tracker that allows users to track poker session details, including buy-in/buy-out, location, datetime & duration, session participants, etc. Implemented comprehensive analytical tools to reveal user's poker habits and trends, including stakes analysis, timing analysis, etc.
- Built a modern and responsive web-app leveraging python/flask for backend and react/tailwind for frontend. Quickly iterated through several frontend designs and pushed new features based on early stage user testing.

## TECHNICAL SKILLS

**Software:** Python, C/C++, SystemVerilog, Verilog, JavaScript, React, HTML/CSS, Tailwind, SQL, MySQL, MongoDB, RISC-V
**Hardware:** Xilinx Vivado, Xilinx Vitis, KiCAD**,** Analog Circuit Design/Analysis, Sequential/Combinational Logic, Time/Frequency Analysis, Oscilloscopes, Function Generators, Power Supplies
**Languages:** Fluent in Mandarin, Conversational in French