

Tyler Forstrom

2 Tower Road, East Hartford, CT 06108 | (475) 239-9648 | tylerjamesforstrom@gmail.com
github.com/TylerJForstrom | linkedin.com/in/tyler-forstrom-b78730226

EDUCATION

Cornell University, College of Engineering
Bachelor of Science in Computer Science, Minor in Business

Ithaca, NY
Expected May 2026

EXPERIENCE

App Developer Intern, Kahua (Construction Software Company)

Internship

- Developed web applications to support construction project workflows and improve data accessibility.
- Built and integrated full-stack features with a focus on performance and user-friendly design.
- Collaborated on tools that streamline communication and organization for project teams.

Agent-Based Stock Market Simulator & Strategy Validation Pipeline

Personal Project | 2025–2026

github.com/TylerJForstrom/Stock-Market-Sim

- Built an agent-based limit-order-book market simulator in pure Python where prices emerge from competing trading agents (market makers, momentum, mean-reversion, and institutional order flow).
- Designed a statistical validation pipeline (Deflated Sharpe Ratio with multiple-testing correction, walk-forward out-of-sample testing, and realistic trading costs) to test strategies honestly and avoid false positives.
- Found no reliable directional edge across eight strategy families, and built a volatility forecaster competitive with industry-standard models (HAR-RV, EWMA) out-of-sample on equities and crypto.
- Wrote ~350 automated tests with continuous integration and a tamper-evident research log; implemented all statistics from scratch with no external numerical libraries.

Sketch-to-Image Enhancement Using Deep Learning (PyTorch)

Personal Project | Hartford, CT

- Built a sketch-to-image generation model using custom U-Net architectures and GAN training (PatchGAN discriminator) in PyTorch.
- Implemented perceptual, edge, and L1 reconstruction losses to improve realism and stability.
- Created a full training pipeline with a multi-stage curriculum (warmup, then GAN, then deep-model refinement).
- Developed a Streamlit app enabling users to draw or upload sketches and generate colorized outputs in real time.

ACTIVITIES

Investments in Technology @ Cornell

Ithaca, NY | Jan 2023

Founder, Treasurer & Portfolio Manager

- Co-founded a club focused on teaching students about investing in the tech industry and managing a real investment portfolio.
- Collaborated with a team to develop educational materials, organize meetings, and lead discussions on investment strategies, market trends, and risk management.

ADDITIONAL INFORMATION

Technical Skills: Java, Python, C, OCaml, PyTorch, TensorFlow, SQL

Interests: Martial Arts, Gaming, Investing, Weightlifting, Golf