Patrick Gadula

gadulapatrick@gmail.com | LinkedIn | Portfolio | 773-494-1791 | Chicago, IL

EDUCATION

University of Illinois at Urbana-Champaign   *Graduated: May 2025*
UIUC College of Liberal Arts and Sciences   *Institution GPA:* **3.50/4.00**
BS in Computer Science & Mathematics

WORK EXPERIENCE

WishTender - Chicago, Illinois   *May 2024 - August 2024*
Software Developer Intern I
- Designed a responsive UI with HTML/CSS for seamless use across desktop and mobile
- Implemented a responsive React frontend with dynamic animations and real-time updates, boosting session duration by 25%
- Optimized database queries by adding missing indexes and restructuring queries to leverage database side aggregations, reducing query response times by 30%

PROJECTS

RAG Vet-Clinical Chatbot (Python)
- Built an NLP chatbot with LangChain + FAISS used for 100+ veterinary cases, improving retrieval accuracy by 30%
- Built a domain-specific pipeline for tokenization, preprocessing, and semantic embedding of veterinary texts
- Leveraged TF-IDF for keyword relevance scoring from a given corpus
- Integrated OpenAI's LLM for real-time Q&A responses

Algorithmic Trading Backtester (Python, Docker)
- Built a reproducible trading research environment using Docker, yfinance, pandas, and statsmodels
- Implemented SMA crossover strategies with parameter optimization and volatility filters
- Integrated ATR based stop-loss and profit target logic into SMA backtests to capture realistic trade exits

Economy and Essentials in Minecraft (Java)
- Designed and extended a server-wide economy system with custom currencies and shops
- Integrated boss battles and rewards into the economy loop, balancing gameplay with probability-based outcomes
- Used Java concurrency and event-driven programming to synchronize player interactions in real time

TECHNICAL SKILLS

Languages: *Python, Java, C++, HTML/CSS, MySQL, PostgreSQL, JavaScript, TypeScript*
Skills: *Natural Language Processing, Generative AI, Data Structures & Algorithms, Object-Oriented Programming, Docker, RESTful API Development, Unit Testing, CI/CD*
Tools: *MongoDB, Git/Github, OpenAI, Neo4j, React, Node, Vite, Express, AWS, Azure (exposure), Postman, Agile*