

ANDREW CHASE GILBERT

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EDUCATION

Johns Hopkins University — B.S. Computer Science & Applied Mathematics and Statistics

Expected May 2027

GPA: 3.87 | Baltimore, MD

Relevant Coursework: Probability & Statistics, Optimization, Computer Systems, Deep Learning, Machine Learning Theory

EXPERIENCE

AI Engineering Intern — Greenboard

Summer 2026

- Refactored the document ingestion and compliance-review backend (Python) into a modular, provider-agnostic architecture, enabling plug-and-play integration of new text-parsing, transcription, and LLM providers across text, PDF, video, audio, and office document types
- Designed and deployed asynchronous backend services on AWS ECS and SQS; instrumented pipelines with AWS CloudWatch for centralized logging, automated error alerting, and end-to-end traceability
- Built an end-to-end benchmark test suite (pytest) covering the full pipeline and wired it into CI/CD (GitHub Actions) to catch regressions across provider swaps and code changes; containerized services with Docker
- Redesigned the customer-facing frontend (React, TypeScript) so users could review cited violations against source documents and accept or reject LLM-suggested edits
- Managed data layers across MySQL and PostgreSQL for document metadata, review results, and violation tracking; used uv for Python dependency and environment management

Software Engineering Intern — Supernova LLC

June 2024 – Aug 2024

- Designed and implemented a Retrieval-Augmented Generation pipeline (OpenAI API) to automate Q&A questionnaire completion, cutting completion time from ~15 hours to 15 minutes via Python-based data retrieval automation
- Developed a projection-geometry + machine learning document-parsing approach that improved parsing accuracy from ~40% to ~90% on complex financial layouts; collaborated with the R&D team to improve model precision and recall

RESEARCH

Multi-Agent Reinforcement Learning Research — Johns Hopkins University

June 2025 – August 2025

- Developed an MPI-enabled distributed training framework for Vanilla Policy Gradient algorithms in multi-agent environments, improving scalability for robotics and competitive-simulation settings
- Authored onboarding documentation for AI-Arena competition participants, reducing the learning curve for new researchers

PROJECTS

Limit Order Book Simulation & Trading Strategies

Course Project

- Built a limit order book matching engine in Rust and implemented deterministic and probability-based order strategies in Python to model price formation

Minecraft Imitation Learning with RL Fine-Tuning

June 2025 – July 2025

- Used MineRL and screen-capture input tracking to train an imitation-learning policy from human gameplay data, then fine-tuned it with Asynchronous Actor-Critic (A3C) for improved in-game task completion

LEADERSHIP & ACTIVITIES

Johns Hopkins Varsity Swimming — Swimmer

August 2023 – November 2025

- Train 20+ hours per week for mid-distance freestyle and sprint events

Hinsdale Central High School Varsity Swimming — Captain (2022/2023)

Nov 2020 – March 2023

- Led team to State and National titles; 8x All-American, 3x State Record Holder (200 Medley Relay, 200 Free Relay, 400 Free Relay)

Hopkins Quant Trading Club — Officer

August 2025 – Present

- Organize problem-solving sessions, resume reviews, and poker nights for club members pursuing quantitative finance careers

TECHNICAL SKILLS

Languages: Python, C++, Rust, TypeScript, C

Frameworks / Libraries: React, PyTorch, OpenCV, NumPy, MPI

Infrastructure / Tools: AWS (ECS, SQS, CloudWatch), Docker, MySQL, PostgreSQL, CI/CD (GitHub Actions), pytest, uv

Interests: Reinforcement Learning, Robotics, Optimization, Strategy Games