

Benjamin Shvartsman

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Resourceful and forward-thinking Computer Science/AI student at Cornell University with a passion for software development and AI/ML. Equipped with robust programming skills and hands-on experience in SDLC and Agile methodologies, I have a proven track record in product development, project management, and collaborative teamwork. I am eager to contribute to a dynamic internship environment while continuously refining my technical and analytical abilities.

EXPERIENCE

AI/ML Intern, Business Information and Forecasting

September 2023 - September 2024

Ecentria Holdings

Remote

- Tasked with **clustering of users and products** on the retail website OpticsPlanet.com, leveraging **matrix factorization-based embeddings** to improve recommendations for **millions of users**.
- Integrated clustering outcomes into **TensorFlow projector**, enabling the ability to toggle between various runs for **comprehensive data visualization and analysis**
- Built a **real-time debugging platform in Streamlit**, integrating **API clients** to diagnose and resolve **product similarity issues in production**.
- Conducted **data preprocessing, cleaning, and analysis** to support and enhance ML model training and validation efficacy.
- Gained hands-on experience with **Bamboo, Bitbucket, Docker, and JIRA**, contributing to **AI/ML documentation** and **project management**.

PROJECTS

Automated Parking Payment Solution | Flask, Twilio, Python

[GitHub](#)

- Developed a real-time automated parking payment system to reduce costly fines for university sports facilities.
- Implemented a **Flask-based backend** with a **pure SMS-based frontend**, integrating **automated scripting** and **multiprocessing** for immediate payment execution upon spotting a ticket enforcer.

Medical Agentic RAG | CrewAI, Streamlit, Groq, Pydantic, Python

[GitHub](#)

- Designed and implemented a **real-time, agentic RAG** (Retrieval-Augmented Generation) system for patient education queries, integrating **CrewAI, ChatGPT-4o, and Groq (LLaMA 3.1-8B Instant)** for dynamic multi-source retrieval/synthesis.
- Developed specialized **AI agents** for **document analysis, search retrieval, and summarization**, leveraging Tavily, Exa, and PyPDF2 to extract actionable medical insights from trusted sources and patient records (PDFs).
- Created a **Streamlit-based frontend** supporting **live document processing, topic-specific contextual retrieval**, and **multi-source aggregation** to deliver clear, patient-friendly health insights

Sports Club Management System (Backend) | Django, Calendly, Stripe, Python, Twilio

[GitHub](#)

- Designed the **backend of a wrestling club management system** using Django, supporting **athlete registration, scheduling, and administrative tasks**
- Integrated **secure data handling** and automated payment processing using **Stripe API**, improving club operational efficiency.

EDUCATION

Cornell University

Graduating Dec 2026

BA in Computer Science, Minor in Artificial Intelligence, Varsity Wrestler

SKILLS

Languages: Python, C/C++, TypeScript, JavaScript, OCaml, SQL

Frameworks & Libraries: TensorFlow, PySpark, CrewAI, Langchain, n8n, Django/Flask, Node, React, Streamlit, Twilio

DevOps & MLOps: Docker, Kubernetes, Google Cloud Platform, CI/CD (Bitbucket, Bamboo)

COURSEWORK

Cornell: Natural Language Processing, Computer Systems and Organization, OOP & Data Structures, Linear Algebra, Mathematical Foundations of Computing, Probability Models and Inference, Introduction to Machine Learning

DeepLearning.AI: [Safe/Reliable AI Guardrails AI](#), [Advanced Use Cases CrewAI](#), [Multi Agent Systems CrewAI](#), [LlamaIndex](#)