Benjamin Shvartsman

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Resourceful and forward-thinking Computer Science/AI student at Cornell University with a passion for software development, machine learning, and data engineering. Equipped with robust programming skills and hands-on experience, I have a proven track record in product development, project management, and collaborative teamwork. I thrive in ambiguous, fast-paced environments and am eager to contribute to impactful, real-world problem solving while continuously refining my technical and analytical abilities.

EXPERIENCE

AI/ML Engineering Intern, Business Intelligence and Forecasting   September 2023 - September 2024
Ecentria Holdings

▪ Gained hands-on exposure to **digital payments infrastructure** and **compliance workflows** at OpticsPlanet.com, supporting **$400M+ in annual transactions** and contributing to projects leveraging a dataset **of 50M+ monthly clicks.**

▪ 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.**

▪ 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**.**

PROJECTS

Precision Health With Palantir and Eleven Labs |Flask, ElevenLabs API, Ontology SDK   **View Demo! (video)**

▪ Designed and implemented a precision health platform within Palantir Foundry to deliver a **real-time clinician dashboard, AI-driven Clinical Decision Support System**, and a **patient-facing voice AI for structured PRO** and vitals collection.

▪ Operationalized **unstructured patient data into actionable insights** by architecting **secure NLP pipelines** enabling real-world evidence-based **treatment recommendations** and real-time clinical alerts.

Post-Op Care Coordination Dashboard|Flask, React, Web Speech API   **View Demo! (video)**

▪ Architected **real-time hospital dashboard** with AI-driven **queue prioritization**, reducing patient wait times while enabling seamless **nurse-doctor coordination**.

▪ Developed **human-AI collaborative workflows** integrating OpenAI models with Palantir AIP for automated clinical data extraction, smart note merging, and real-time queue recalculation based on patient status changes.

Medical Agentic RAG |CrewAI, Streamlit, Groq, Pydantic   **View Project!**

▪ 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).

EDUCATION

Cornell University

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

SKILLS

Languages: Python, Java, C/C++, TypeScript, JavaScript, SQL
Consulting/FDE: Technical Scoping, Rapid Prototyping, Creative Solution Design, Written and Verbal Communication
Data & Frameworks: React, Scikit-Learn, PySpark, Tensorflow, Django, Flask, FastAPI, .NET, UI Frameworks, REST APIs
DevOps: Docker, Kubernetes, GCP, CI/CD (Bitbucket/Bamboo), Git, MongoDB, MySQL

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