

Ethan Chen

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EDUCATION

Cornell University, Cornell Tech New York, NY
MEng in Computer Science May 2026

Relevant Coursework: Machine Learning Engineering, ML Hardware and Systems, Reinforcement Learning, Generative Models

University of Illinois at Urbana Champaign Urbana, IL
BS in Computer Science and Music, GPA: 3.74 / 4.00 May 2025

Relevant Coursework: Applied Machine Learning, Database Systems, Computer Systems, NLP, Deep Learning for Computer Vision

PROFESSIONAL EXPERIENCE

Cornell Tech – S4AI, Researcher, New York, NY Sep. 2025 - Present

- Collaborating with Prof. Gupta and Microsoft Azure Research team to co-design an energy-efficient LLM serving system.
- Benchmarking distributed serving frameworks (vLLM, SGLang) to evaluate energy, throughput, and latency.
- Contributed to SGLang by implementing tail-optimized LRU KV cache eviction, reducing tail latency by up to 33%.

Bluffingface, Founder, Chicago, IL Summer 2025

- Built an online poker platform with immersive 3D gameplay (Three.js), raising \$100,000 in angel investment.
- Deployed scalable backend on AWS EC2 with redundancy and failover, supporting 800+ concurrent players.

Creatorain, Software Engineer, Urbana, IL Jun. 2024 – Jul. 2025

- Launched creatorain.com, an influencer matching platform, with vector database (Pinecone) and React.
- Created a database of 2M+ US influencers with PostgreSQL and reached 50k+ influencers for clients.
- Optimized AI customer support chatbot for Nutr (Shark Tank company) with RAG, reducing API costs by 90%.

SELECTED PROJECTS

Algophony (Data Engineering, Deep Learning) Jan. 2024 – May. 2024

Class Project, AI Music Generation

- Trained generative music models in PyTorch, implementing CVAE and diffusion architectures.
- Engineered 500+ GB of audio training data using NumPy, Pandas, and Python audio libraries.

Loopbop (Web Dev, Graph Database) Spring 2025

Capstone Project, 3D Music Genre Explorer

- Created loopbop.com, a music genre explorer, with Three.js and React, blending real-time gameplay and 3D exploration.
- Implemented graph database with Neo4j, enabling fast traversal of 30k+ songs and associated artists, genres, albums, etc.

Reinforced Poker (Reinforcement Learning) Summer 2024

- Trained a self-play poker bot using Q-Learning, outperforming algorithmic bots and real players.
- Simulated 15 million games, running critical components in C/Cython and reducing training time by 30x.

AltCredit (Machine Learning) Fall 2025

HackIllinois '25 Project, ML credit scoring system to expand loan access for undocumented individuals.

- Prototyped a fast backend with FastAPI to efficiently parse official documents and process user data.
- Built a data pipeline using PySpark, updating the classification model in real time.

TECHNICAL SKILLS

Coding Language: Python, C/C++, JavaScript/TypeScript, SQL, Java, Swift, Scala

Framework and Tool: PyTorch, Numba, Triton, SGLang, GCP, AWS, Neo4j, PostgreSQL, MongoDB, Redis, PySpark, React, vLLM