David Andras

Chicago, IL | andrasdavid2006@gmail.com | dandrew.net | SourceDA | david-andras-da06

Education

University of Illinois Chicago (UIC), Bachelor of Science in Computer Science — Expected Dec 2028

- Cumulative GPA: 4.00 / 4.00
- Relevant Coursework: Data Structures, Programming Practicum, Applied Linear Algebra, Program Design II

Skills

Languages & Web: Python, C/C++, Java, JavaScript, C#, HTML, CSS

Frameworks & Libraries: PyTorch, Hugging Face, vLLM, OpenCV, Flask, React, Socket.IO

Tools & Platforms: Docker, Kubernetes, Linux, Git, PostgreSQL, nginx, Cloudflare Tunnel, Unity, VS Code

Experience

LLM Reasoning & Evaluation Research Intern, UIC Computer Science Department — Jun 2026 - Jul 2026

- Designed five configurable reasoning benchmarks—SORT, NBC, CMPP, LBC, and VC—covering sorting, number-base conversion, lexical comparison, string length, and vowel counting.
- Evaluated Chain-of-Thought, Plan-and-Solve, and Symbolic CoT across Qwen3-14B, Phi-4, Gemma-3-12B, Mistral-Small-24B, and Llama-3.1-8B using containerized vLLM jobs on Nautilus Kubernetes GPUs.
- Parallelized batched inference for five times the throughput and improved valid-output parsing from 37/250 to 238/250; Symbolic CoT reached 85.2% on SORT-16 versus 16.4% without reasoning.

Projects

Self-Hosted Portfolio Website – **HTML, CSS, Docker, nginx, Cloudflare Tunnel** — Jul 2026 - Aug 2026

- Built and self-hosted a responsive static portfolio on Ubuntu using Dockerized nginx.
- Published it through a localhost-only Cloudflare Tunnel and automated deployments with a shell script.

Creator Bridge – Hackathon Project – **React, Flask, PostgreSQL, Socket.IO** — Feb 6-7, 2026

- Built a portfolio platform for artists to upload work, follow creators, and post blogs with live updates.
- Designed the PostgreSQL schema and implemented Flask routes for user accounts and blog posts.

Computer Vision Pong Game – **Python, OpenCV** — Oct 2024 - Apr 2025

- Built a controller-free game interface where players used blue and green markers to control paddles.
- Implemented color thresholding with OpenCV and NumPy for real-time marker tracking.
- Contributed to early test runs of a game later played by 500+ students at a live event.

Progressive Flappy Bird Mod – **Python, Pygame** — Aug 2024 - Sep 2024

- Added score-based speed, pipe-frequency, and gap scaling to an open-source Pygame Flappy Bird clone.
- Adapted it for a 1280×1024 cafeteria arcade cabinet with persistent play and high-score counters.
- Recorded 3,000+ play sessions without a crash.

Involvement

AI Special Interest Group Member, Association for Computing Machinery (ACM) — Aug 2025 - Dec 2025

- Built and tuned a PyTorch housing-price prediction model using real-estate data.