

Aidan Andrews

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EDUCATION

University of Illinois at Urbana-Champaign — James Scholar

B.S. Engineering Physics: AI/ML Focus, Minors in Computer Science and Math

Expected: May 2026, GPA: 3.9

PUBLICATIONS

Can Transformers Perform Low-Level Control In-Context?

Under Review

- Learning for Dynamics & Control Conference (L4DC 2026). Work conducted at UC Berkeley BAIR.

RESEARCH EXPERIENCE

Robotics Researcher – KIMLAB

Aug 2025 – Present

On-Site

University of Illinois at Urbana-Champaign

- Investigating embodied foundation models for Unitree G1 humanoid manipulation using vision-language-action models.
- Integrated GR00T N1.5 with Isaac Sim/Lab, implementing real-time streaming control and comprehensive state logging.
- Built ROS2 bridge architecture for SO-101 (single-arm) manipulator as diagnostic testbed for teleoperation workflows.
- Implementing hierarchical control: VLA-based upper-body manipulation with stabilization policies for balance.

AI Researcher – BAIR – Prof. Gireeja Ranade

April 2025 – Present

Hybrid

UC Berkeley AI Research Lab

- Conducted research on transformer-based control, applying in-context learning to stabilize nonlinear and unstable dynamical systems (cartpole, acrobot).
- Designed and implemented a GPT-2-based few-shot controller that learns control strategies without retraining.
- Demonstrated generalization to unseen dynamics without weight updates or explicit system identification.

AI Researcher – AIFARMS, NCSA, CDA – Prof. Vikram Adve

Oct 2024 – Present

On-Site

University of Illinois at Urbana-Champaign

- Professor leveraged our research to co-found AgAnswers.ai; currently serving as CTO and founding engineer.
- Researching agentic LLM systems for agriculture: hierarchical multi-agent orchestration, context retrieval/management, and task delegation across specialized agents.
- Developing knowledge graphs for structured data representation; building tools (CSV, Shapefile agents) enabling LLMs to interact meaningfully with heterogeneous farm data streams.

TEACHING EXPERIENCE

Course Assistant & Project Manager – CS 124

Dec 2023 – May 2024

On-Site

University of Illinois at Urbana-Champaign

- Tutored students and led office hours for introductory computer science course.
- Mentored undergraduate teams through semester-long AI projects (Honors section).

INDUSTRY & ENGINEERING EXPERIENCE

CTO & Founding AI Engineer – AgAnswers.ai

May 2025 – Present

Remote

Full-stack AI platform with multi-agent orchestration, vector DBs, and knowledge graphs

AI Engineer – BrightTech AI & Qsystems AI

May 2025 – Aug 2025

On-Site

Built AI tools and CrewAI-based multi-agent orchestration for enterprise workflows

Founding AI/ML Engineer – Startup (NDA)

May 2024 – Aug 2024

Remote

Novel RAG architectures and hybrid embedding classification for resource-constrained NLP

Founder – AAXIOM.org Startup Portfolio

March 2023 – Aug 2025

NVRALONE (\$10K/month peak), IlliniPlan (1k+ users), Voxed (Acquired May 2025)

PROJECTS — AIDANANDREWS.INFO/PROJECTS

Manim Video Agent | LLM, In-Context Learning – Audio/video agent with recursive error correction

Devanagari Recognition | TensorFlow – CNN for handwritten language recognition

Climate Predict | Rust – Multi-regression models for temperature prediction

MinLLM | Python – Zero-dependency LLM workflow framework (100 LOC)

IlliniPlan | React, Postgres – Course scheduler (1k+ users, 10k+ schedules)

Voxed.ai | Google Cloud, OpenAI – AI notebook with RAG (Acquired May 2025)

LEADERSHIP & EXTRACURRICULARS

Former D1 College Hockey | UIUC ACHA Division 1 **Chess** | 2000 OTB, training for FIDE Master

Pro Bono Projects – Apps, AI tools, and websites for community members at no cost

BuildIllinois Cohort **Treasurer, Illini Business Forum** **Content Creator** | 11k+ followers

TECHNICAL SKILLS

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

Robotics: ROS2, Isaac Sim/Lab, MuJoCo, Teleoperation

ML/AI: PyTorch, TensorFlow, Transformers, VLA

Infrastructure: Docker, Linux, Git, AWS, CUDA

OTHER

Clubs/Organizations: NSBE, MEP

Community: Run educational Discord server (1k+ members) focused on CS, ML/AI, Math, Physics