HAYDEN A. ARNOLD

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Education

Master of Science in Computer Science, Machine Learning Specialization — December 2027
Georgia Institute of Technology — *Atlanta, Georgia*

Master of Science in Computational Social Science — June 2026
Korea Advanced Institute of Science and Technology — *Daejeon, South Korea*

Bachelor of Science in Computer Science — May 2024
University of Arizona — *Tucson, Arizona*

- Cumulative GPA: 3.83, *magna cum laude* distinction

Honors Bachelor of Arts in Political Science, Foreign Affairs Emphasis — May 2024
University of Arizona — *Tucson, Arizona*

- Minors in Korean and Spanish Language
- Cumulative GPA: 3.83, *magna cum laude* distinction

Select Publications

Arnold, H., Kim, S., & Kim, T. (2026). How Does Toxicity Emerge in Political Livestreams? Large-Scale Evidence from Twitch. Under review at *Political Communication*.

Yu, X., **Arnold, H.**, Su, B., & Blanco, E. (2025). Measuring and Forecasting Conversation Incivility: the Role of Prosocial and Antisocial Behaviors. In *Proceedings of the 19th AAAI Conference on Web and Social Media (ICWSM)*.

Work Experience

Prompt Engineer — 03/2024 – Present
DataAnnotation.tech — *Remote*

- Trained LLMs through programming-focused annotation and comparative model evaluation across 300+ prompts
- Engineered adversarial prompts to stress-test model failure modes, contributing to safety and quality improvements on frontier models including Gemini 3.0
- Delivered structured feedback identifying edge cases in code generation and reasoning tasks

Data Analyst Intern — 01/2024 – 05/2024
Pima County Democratic Party — *Tucson, Arizona*

- Designed and implemented quantitative data collection pipelines to track trends in 10+ voter issues across 266 precincts
- Applied machine learning models to predict election outcomes, achieving 80% accuracy against actual results
- Communicated findings to stakeholders on policies and candidates during internal and public-facing presentations

Senior Undergraduate Teaching Assistant — 01/2023 – 05/2024
University of Arizona Department of Computer Science — *Tucson, Arizona*

- Managed a team of 10+ TAs as primary liaison between professor and course staff for a class of 500+ students
- Drove structural and content improvements to course materials, resulting in improved student feedback scores
- Coordinated top-down logistics to ensure consistent course delivery across all sections

Undergraduate Teaching Assistant — 08/2021 – 12/2022
University of Arizona Department of Computer Science — *Tucson, Arizona*

- Led groups of 20+ students per semester in Python-heavy coursework, holding office hours and grading assignments
- Held supplemental instruction sessions of 100+ students to prepare for exam content

Projects

(2025) Law School Admissions Calculator — GitHub Link, Website Link
Predicts U.S. law school admissions results from historical data using Python, NumPy, Pandas, Scikit-learn, deployed in Vercel using Flask and Render for backend

Skills

Skills: R, Python (NumPy, Pandas, Scikit-learn, TensorFlow Keras, PyTorch, Matplotlib, Seaborn), Java (JavaFX, Lucene), C, SQL, JavaScript, HTML/CSS (Bootstrap), Machine Learning, Natural Language Processing (NLP), Deep Learning, Data Modeling, Data Science, Network Analysis, Statistics, Data Mining, Data Structures

Spoken Languages: English (native), Korean (fluent; TOPIK Level 5), Spanish (advanced; Seal of Biliteracy)