

Logan M. Jones

I am a CS student with a focus on applied mathematics, interested in problems that map local interactions to complex global behavior at the intersection of computation, physics, and biology. My interests include emergence as a process, models of collective animal behavior, evolutionary computation, graph-based analyses, cellular automata, and the mathematical frameworks used to analyze dynamical systems. I am particularly interested in understanding how definitions, frameworks, and scale of analysis can be refined, their failure modes, and their applicability to new problem domains. I am seeking projects involving simulation, analysis, and modeling of complex systems or underlying methodological frameworks.

EDUCATION May 2024 – present

Weber State University • Overall GPA: 3.98

- A.S. in Computer Science (expected Apr 2026)
- B.S. in Computer Science - Math Minor (expected 2028)
- Provost's/Dean's List May 2024 - Dec. 2025
- LIGHT Team Research: Light Pollution and Bird Migration (beginning Spring 2026)

EXPERIENCE January 2019 – present (part time while enrolled)

Admin. Assistant • SmartGuard Rx Inc. • Layton, UT • Industry reference available

- Designed and implemented workflow automation processes: automated document generation, low-touch training materials, and a logistics management system.
- Analyzed business data to assist in product design, inventory management, medical device regulatory compliance, and strategic decision making.
- Fully responsible for creation and maintenance of a digital store, including PPC and SEM campaigns: 15 million impressions, ROAS > 1.5, \$161k attributed sales.
- Trained diverse personnel within strict deadlines during a nationwide product launch.

SKILLS

- Proficient in C/C++, Python, SQL, git workflows.
- Familiar with MIPS, JavaScript, Prolog, and Mathematica.
- Modular and maintainable design; object-oriented and concurrent development.
- Coursework: algorithms, probability and statistics, linear algebra, calculus III, mathematical modeling, networking, databases, and computer architecture.

Technical Projects / Applied Skills

- Maintainer of an open-source knowledge-base and Discord bot for a community of 12k+ students, researchers, and ant-keepers. (www.antscihub.com)
- Andrushko's Butterflies: Assisted with digitizing a museum Lepidopteran collection, including specimen handling, workflow optimization, and data transcription. (Fall 2025)
- One observation included in the iNaturalist image dataset analyzed in Church et al., *Current Biology* (2025), DOI 10.1016/j.cub.2025.05.066 (iNat Obs. ID:130996363)
- iNaturalist open-data contributor: 1,089 observations; 569 Research Grade (~52%).
- Technical photography/editing: ultra-macro, underwater, wildlife, customized gear.