Luke Bielawski

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EDUCATION

University of Illinois at Urbana-Champaign

Champaign-Urbana, IL

Bachelor of Science in Mathematics, Bachelor of Science in Physics

Expected May 2026

Minor in Computer Science

- Cumulative GPA: 3.98 / 4.0
- Chancellor's Scholar, LAS James Scholar, Dean's List
- Relevant Coursework: Smooth Manifolds, Probability Theory, Quantum Mechanics, Electrodynamics

RESEARCH

University of Maryland

College Park, Maryland

TREND: Collective Behavior

June 2025 - August 2025

Illinois Institute of Technology

Chicago, IL

SURE: Speedier Simulations

May 2024 - August 2024

- Investigated low discrepancy sequences and their application to kernel density estimation
- Researched and implemented quasi-Monte Carlo density estimation with conditioning into QMCPy
- Presented research biweekly for other students and faculty utilizing LaTeX and Beamer

Illinois Mathematics Lab

Champaign-Urbana, IL

Linear Poisson Structures and their Cohomology

Jan 2024 - May 2024

- Calculated Cohomology groups for various linear Poisson structures via power series
- Wrote Python code to automatically calculate Cohomology classes with finite degree power series
- Exhibited findings at Undergraduate Research Symposium and IML Poster Session

WORK EXPERIENCE

Varsity Tutors

Arlington Heights, IL

Remote Tutor for ACT, SAT, Competition Math

June 2023 - August 2023

- Provided individual instruction to 6 students on a weekly basis over a two-month span
- Measured student progress through regular testing, adapting instruction to match individual needs
- Taught content as well as test-taking techniques to best prepare students for their academic goals

Code Ninjas

Arlington Heights, IL

Code Sensei

June 2022 - Nov 2022

- Instructed groups of 25 students aged 8-14 on introductory JavaScript, Scratch, and Roblox
- Maintained classroom equipment, offered one-on-one assistance, and operated front desk
- Ran a week-long summer day camp program for students ages 3-8 introducing computer science concepts

LEADERSHIP EXPERIENCE

Chi Psi Fraternity

Champaign-Urbana, IL

Dec 2023 - May 2024

Scholarship Chair

- Facilitated study hours for the brothers to promote productive and consistent study habits
- Offered support and strategizing with academically struggling brothers to best improve
- Coordinated with alumni and brothers on internal scholarships and academic purchases

ADDITIONAL INFORMATION

Technical Skills: Python, MATLAB, Mathematica, Microsoft Excel, Italian

Academic Interests: Differential Geometry, Probability Theory, Mathematical Physics **Other Interests:** Putnam Math Competition, Quantitative Finance, Flute and Music