Ethan Knox



A strong mathematics background lending to an innate understanding of the laws of physics. Particularly interested in scientific computing / computational physics, as it not only greatly elucidates the underlying physical phenomena, but is frequently at the intersection of theory, experiment, and industry. I look forward to assisting my future team solve problems and complete professional goals while honing my skills as a scientist.

Education

Purdue University West Lafayette, IN

Bachelor of Science in Mathematics, Minor in Psychology | GPA: 3.5

June 2017 - May 2021

Bachelor of Science in Physics, Minor in Astronomy | GPA: 3.5

June 2017 - May 2021

Southport High School

Indianapolis, IN August 2013 - May 2017

Diploma | GPA: 3.4

Skills

- Mathematics (Calculus, Differential Equations, Linear Algebra)
- Python (Numpy, Scipy, Sympy, Pandas, Matplotlib)
- Data Analysis (Image Post-Processing and Higher-Level Analysis) Teamwork (Eagle Scout, Scholastic/Extracurricular Sports)
- Physics (Mechanics/Dynamics, Astrophysics/Cosmology)
- C/C++ (Boost, XTensor Libraries)

Experience

University of Illinois | Urbana-Champaign

Champaign, IL

Student August 2022 - May 2023

- Began Master of Science in Mathematics program to survey further topics in math.
- Changed direction to hopefully find a place in industry via internship etc.

The Tap West Lafayette, IN

Bar-Back October 2021 - June 2022

- Assisting and training underneath the bartenders; helping behind the bar.
- Knowledge-bank and creative resource for whisk(e)y and cocktails.

Purdue University West Lafayette, IN

Research Assistant August - December 2020

- Collaborated with the Iyer-Biswas lab to discover principles governing stochastic single-cell behavior.
- Analyzed and processed individual frames of cell growth using custom Python scripts.
- Summarized progress and clarified treatment of special cases in weekly all-staff meetings.

• Published research can be found at: https://iyerbiswas.com/research/

Gander Mountain Greenwood, IN

Sales Assocoiate July 2016 - January 2017

- Advised customers in the camping and firearms department using prior scouting experience.
- Organized and stratified product from new shipments to keep the store running smoothly.

Awards & Scholarships

The Tap

West Lafayette, IN

"Above and Beyond" Award December 2022

Purdue University West Lafayette, IN

Dean's List Fall '17, Spring '20

Semester Honors Fall '17, Fall '18 - Spring '20

Provost Summer Scholarship Summer 2017, Summer 2018

Frank O'Bannon Honors & Accelerated Scholarships

David R. Lebeson Memorial Scholarship

T. G. Alford Scholarship

Southport High School Indianapolis, IN

Science Department "Student of the Month"

November 2016

Boy Scouts of America | Troop 92 Indianapolis, IN

"Scout of the Year" September 2016

Eagle Scout August 2016

Extracurricular

Brazilian Jiu-Jitsu Varying Gyms

Practitioner August 2018 - Present

- A means of personal maintenance both mental and physical.
- · Although usually thought of as an individual sport, there are countless opportunities to mentor and teach others during practice.

Boy Scouts of America | Troop 92

Indianapolis, IN

Assistant Scoutmaster August 2016 - June 2017

- Guided and mentored younger scouts in their positions and progression through the troop.
- Acted as liaison between the scouts and scoutmasters to plan trips and other activities.
- Managed rank advancements, supplies, and maintenance of equipment to support troop operations.

Senior Patrol Leader August 2014 - August 2016

- Coordinated meetings, outings, and events with individual patrol leaders for the entire troop.
- Communicated responsibilities and duties to other troop members and assisted them in their tasks.