**Noah Trupin** 

https://ntrupin.com Computer Science Purdue University Email: natrupin@gmail.com Phone: +1-609-533-7344

GitHub: ntrupin LinkedIn: in/ntrupin

#### **EDUCATION**

Purdue University
 Pursuing Bachelor of Science in Computer Science

West Lafayette, IN Aug. 2023 - Present

• The Lawrenceville School High School Diploma

Lawrenceville, NJ Sept. 2019 - May 2023

## **EXPERIENCE**

### • The Lawrenceville School

Developer, Researcher, and Tutor

Lawrenceville, NJ Dec. 2021 - May 2023

- **Sentinel**: The Lawrenceville School's internal extensible utility. Developed a full-stack framework and API for students to build web-based simulations using Node.js and Websockets.
- Stroud Water Research Center: Created models to predict the behavior of endangered rivers in Lawrence
  Township and inform land management decisions. Generated observations matrices and predictive regressions
  with Numpy and visualizations with Matplotlib.
- **The Lawrence**: Lawrenceville's student-run publication, the second oldest weekly high school publication in the US. Built a full-stack website, complete with articles, issues, author pages, search functionality, editor login, an article editor, and an author manager with Ruby on Rails.
- MA555 Assistant: Served as an assistant in MA555: Honors Computer Programming. Guided students through learning the Wolfram Language, Mathematica, and foundations of technical computing. Designed and presented multiple demonstrations and lessons.

MEGA League
 Lead Web Developer and Event Organizer

Princeton, NJ Nov. 2021 - April 2022

- **Lead Web Developer**: Lead a scrum team to develop the original website for MEGA, featuring hackathon information and a sign-up portal.
- **Event Organizer**: Organized MEGA's inaugural hackathon in April 2022, attended by hundreds of students virtually and in-person from over 20 schools around the world. Communicated and facilitated partnerships with over 30 schools and NGOs to bring speakers, prizes, and other opportunities to participants.

• CodeltForward Lawrence, NJ
Teacher Nov. 2021 - Mar. 2022

- Taught internet literacy and basic web development to elementary and middle-school students from under-resourced schools.
- Designed and executed weekly lessons that taught participating students valuable skills in fun, engaging ways.
- Helped students publish self-built personal webpages to private sites to show their family and friends.

#### **PROJECTS**

- Interactive Simulation Framework: Node.js API and frontend/backend kit for creating interactive JS simulations.
- Hexdump Utility: Command-line hexdump featuring colored output, buffering, and side-by-side text written in C.
- Personal Website: Full-stack Flask/PostgreSQL app where I edit and display my projects, writing, and info.
- Physics Simulations: Orbital and Optical JavaScript simulations built on my kinematics and 2D raytracing engines.
- Publication Website: Full-stack Rails/PostgreSQL app with features for uploading, editing, and viewing articles.
- Water Quality Modeling Tool: Python program to generate predications and visualizations from CSV river data.
- Tutor Matching System: GSuite-integrated website to match students with tutors at Lawrenceville.

# **SKILLS**

**Languages**: Python, C, Wolfram, Ruby, JavaScript **Technologies**: AWS, React, Rails, Flask