

# Aaron Falk

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## SOFTWARE EXPERIENCE

### PGT Trucking – Applied Technology Intern

*May 2022 – August 2023*

- Led development for an application to streamline billing and payroll processes that reduced end-user time spent on these tasks with a 22% increase in productivity.
- Created an enterprise-level RESTful API using the Express framework that dynamically generates and delivers PDF documents.
- Automated processes using Python scripts scheduled through the Windows Scheduler, optimizing workflows for enhanced productivity.

### CMPSC 431W – Database Design Project

*August 2023 – December 2023*

- Designed, developed, and implemented the Graduate Request Solutions Portal, a ticketing system to process and manage student requests.
- Collaborated directly with the Penn State CSE department and staff to establish criteria such as roles, functionalities, and technical limitations.

### HackPSU – Technical Team Member

*January 2023 – Current*

- Developed HackPSU platform tools utilized for registration and event coordination.
  - Mentored new team members, accelerating onboarding and increasing team productivity.
  - Organized and judged projects at the largest Hackathon at Penn State.
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## EDUCATION

### The Pennsylvania State University

Bachelor of Science in Computer Science

Minor: Mathematics

College of Engineering and Schreyer Honors College

**GPA: 3.99 / 4.00**

Date of Graduation: December 2024

Courses: Data Structures & Algorithms, Database Management Systems, Machine Learning & AI, Operating Systems, Statistics

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## SKILLS

- **Programming Languages:** C, Java, JavaScript, Python, ReactJS, Scheme, TypeScript, Verilog
  - **Markup Languages:** CSS, HTML, LaTeX, Markdown
  - **Database:** Google Cloud SQL, Google Firebase, MariaDB, Microsoft SQL Server, Supabase
  - **Version Control:** Git and GitHub
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## RESEARCH EXPERIENCE

### The Pennsylvania State University, Department of Computer Science and Engineering

*January 2024 – Current*

- Investigated the Boolean Satisfiability Problem, exploring how to improve SAT-solving algorithms by using a Graph Attention Network to guide the decision heuristic.