

# Justin B. Helfman

440-465-9588 | jhelfman@purdue.edu | <https://jbhelf.github.io>

## SUMMARY

Ambitious computer engineer with 3+ years of experience in software engineering and artificial intelligence. Vast exposure to project implementation, most recently with a project that saves an estimated 2000 hours per year by automating parts of software testing.

## EDUCATION

**Purdue University, West Lafayette, Indiana**

**August 2018 - May 2022**

B.S. Computer Engineering

**GPA: 3.12/4.0**

Entrepreneurship & Innovation Certificate

**Relevant Coursework:** Microprocessor Systems and Interfacing (Current) • Artificial Intelligence (Graduate Level) • Introduction to Deep Learning (Graduate Level) • Introduction to Computer Communication Networks • Data Structures • Python for Data Science • Advanced C Programming

## PROJECTS & TECHNOLOGIES

**SARS-CoV-2 (COVID-19) Analyses**

**May-December 2020**

- (Personal Work): Administered predictive mortality and infection models and observed trends between these forecasts and global ratings by country of human development, free press, and mean years of schooling
- (Coursework): Investigated disease modeling methods and presented an ICML-style paper and findings

**Computer Networking Design Projects**

**August - December 2020**

- Developed programs to emulate HTTP clients, servers, fork operations, and caesar cipher encryption
- Generated a routing protocol program using the User Datagram Protocol (UDP)

**Deep Learning (Neural Networks) Design Projects**

**August - December 2020**

- Developed Neural Turing Machines, Convolutional LSTM, and Generative Adversarial Networks

**New York City (NYC) Bike Traffic Probe**

**April-May 2020**

- Modeled biker congestion with respect to weather and bridges used to estimate citations distributed

**Languages:** C (3 years) • Python (3 years) • MATLAB (3 years) • C++ (0-1 year) • PowerShell (1 year)

**Other:** Unix (3 years) • Git (3 years) • Vim (3 years) • VisualStudio & Eclipse (1 year) • Tensorflow & PyTorch (0-1 year)

## WORK & LEADERSHIP EXPERIENCE

**Eaton Corporation, Moon Township, Pennsylvania — Co-op Program**

**January - April 2021**

**Eaton Corporation, Plymouth, Minnesota/Remote — Software Engineering Intern**

**June - August 2020**

- Partnered in a scrum-based team, executing multiple sprint periods
- Supported migration of automated build and deployment servers
- Organized and delivered a continuous integration/continuous development tool using virtual machines
- Presented project final summary saving an estimated 2000 hours per year

**Alpha Epsilon Pi, Recruitment Chair, Executive Board Member**

**January 2019 - November 2021**

- Orchestrated the recruitment team, enrolling a new member class, exceeding previous records by 35%
- Designed socially distant events during the COVID-19 pandemic increasing membership by 16%

**GOJO Industries, Akron, Ohio — Summer Intern**

**May - July 2019**

- Collaborated with internal studies and conducted panel testing for Purell prototyped products
- Implemented an internal study and evaluated customer responses versus qualitative results

**GOJO Industries, Akron, Ohio — Summer Intern**

**June - August 2018**

- Integrated into a research setting, studying product paradigms and their capabilities
- Documented final findings, and advised further actions to consider before product launch

**GOJO Industries, Akron, Ohio — Summer Intern**

**June - August 2017**

- Partnered with customer outreach and quality assurance teams, overseeing product manufacturing
- Monitored the procedures of a quality assurance check on recently recalled products