

Justin B. Helfman

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

SUMMARY

Ambitious computer engineer with 4+ years of experience in devops, software engineering and artificial intelligence. Vast exposure to project implementation, most recently working with AWS to create AMIs used over 130,000 times (over 12 weeks) in testing.

EDUCATION

Purdue University, West Lafayette, Indiana

August 2018 - May 2022

GPA: 3.12/4.0

- B.S. Computer Engineering
- Entrepreneurship & Innovation Certificate
- **Relevant Coursework:** Operating Systems Engineering (Spring) • Introduction to Computer Security (Spring) • Digital Systems Senior Design • Microprocessor Systems and Interfacing • Artificial Intelligence (*Graduate Level*) • Introduction to Deep Learning (*Graduate Level*) • Introduction to Computer Communication Networks • Data Structures • Python for Data Science • Advanced C Programming

WORK & LEADERSHIP EXPERIENCE

Alteryx, Broomfield, Colorado – DevOps Engineering Intern

May - August 2021

- Built Amazon Machine Images (AMI) to expand what data sources may be used with Alteryx Designer
- AMIs used in over 130,000 instances in GitLab pipelines over a 12 week period
- Built framework to automatically audit AMIs and determine value based on accessibility and security
- Worked with a nonprofit, using Designer to curate a data-based solutions aiding leaders in decision-making

Eaton Corporation, Moon Township, Pennsylvania – Software Engineering Intern

January - April 2021

- Lead development for testing automation practices with firmware products
- Created remote scripts to interface with circuit breakers

Eaton Corporation, Plymouth, Minnesota/Remote – Software Engineering Intern

June - August 2020

- Supported migration of automated build and deployment servers from Jenkins to Atlassian Bamboo
- 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 (Purdue University)

January 2019 - November 2020

- 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%

PROJECTS & TECHNOLOGIES

Digital Systems Design Project

August - December 2021

- Creating an app to record and display the results of a physical chess game
- Working with chess AI to aid player moves, and provide a variable difficulty computer to play against

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

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

Languages: C (3 years) • Python (3 years) • MATLAB (3 years) • PowerShell (2 years) • YAML (0-1 year) • Ansible (0-1 year) • C++ (0-1 year)

Technologies: Linux/Unix (3 years) • Git (3 years) • CI/CD (1 year) • AWS (0-1 year) • Tensorflow & PyTorch (0-1 year) • Packer (0-1 year) • Terraform (0-1 year)