# Justin B. Helfman

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#### **EDUCATION**

### Purdue University, West Lafayette, Indiana

August 2018 - May 2022 **B.S.** Computer Engineering

GPA: 3.14/4.0

Entrepreneurship & Innovation Certificate

#### **WORK & LEADERSHIP EXPERIENCE**

#### Alteryx, Broomfield, Colorado — Associate Site Reliability Engineer

July 2022 - January 2023

- Oversaw cloud operations efforts, resolving urgent defects and system outages affecting customers
- Directed SRE into an agile-based workflow, resulting in 29 documented and completed epics in 3 months
- Orchestrated design of automated auditing tools for Security and Organizational Controls (SOC 2)

#### Purdue University, West Lafayette, Indiana - Teaching Assistant (Software Engineering Tools) January - May 2022

Created coursework to give students experience in CI/CD topics using GitHub actions

Course topics included CI/CD, IaaS, PaaS, FaaS, Python, NodeJs, UNIX, GIT, JIRA, and Fuzzing

# 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 a framework to automatically audit AMIs and determine value based on accessibility and security

### Eaton Corporation, Moon Township, Pennsylvania — Software Engineering Intern

January - April 2021

Created remote scripts to interface with circuit breakers, testing for functionality and defects

### Eaton Corporation, Plymouth, Minnesota — Software Engineering Intern

June - August 2020

- Organized and delivered a continuous integration/continuous development tool using virtual machines
- Presented project final summary saving an estimated 2000 hours per year within my team

## Alpha Epsilon Pi — Recruitment Chair, Executive Board Member

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**

#### **NHL Score Prediction Neural Network**

December 2022-Present

Designing a multilayer perceptron neural network that predicts NHL game outcomes

#### **Movie Recommendation Bot**

January 2022

Built an automated texting service that processed participant voting based on a list of movies

#### **Digital Systems Design Project**

August - December 2021

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

# **Computer Networking Design Projects**

August - December 2020

Developed code emulating HTTP clients, servers, forking, caesar cipher encryption, and UDP routing

### Deep Learning (Neural Networks) Design Projects

August - December 2020

Implemented Neural Turing Machines, Convolutional LSTM, and Generative Adversarial Networks

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

May-December 2020

- Compiled a review and method validation of 4 ICML papers in the context of infectious disease forecasting
- 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

# LANGUAGES & TECHNOLOGIES

C (4 years) ● Python (4 years) ● Linux/Unix (4 years) ● Git (4 years) ● PowerShell (3 years) ● CI/CD (2 years) ● HTML (0-1 year) • SQL (0-1 year) • AWS (0-1 year) • Google Cloud Platform (0-1 year) • Tensorflow & PyTorch (0-1 year)