



education

university of pennsylvania bse | computer science

2017-present

- gpa: 3.71 (6 semesters)
- minors: math, data science
- graduation: may 2021

mount olive high school

2013-2017

- class salutatorian
- sat: 2280, act: 34

coursework

computation

machine learning (current)
databases
computer operating systems
interactive computer graphics
algorithms
big data analytics
networked systems
computer architectures
data structures

stat/math

simulation modeling
probability
computer linear algebra
discrete mathematics (cs)

skills

data

python • pandas

databases

sql • mongodb • neo4j • aws

web

javascript • node.js • react •
HTML\CSS\Bootstrap

other languages

java • c • c++ • matlab

other technologies

git • docker • linux •
solidworks

interests

playing sports, watching and
reading science fiction.

experience

bashpole software | software engineering intern

may 2020 - aug 2020

- rebuilding a detection codebase including a website, tipline and backend api implementing facial recognition technology, with the ability to compare and identify faces, intended to support anti-trafficking operations
- utilizing javascript (angular/node.js), twilio, docker aws, mongodb, java and python for front-end and back-end development, data storage and deployment

action iq | software engineering intern

summer 2020

- internship cancelled due to COVID-19

bae systems | software engineering intern

may 2019 - aug 2019

- developed software for flight modules, specifically a power supply control panel with limit and safety controls along with path controls; developed in C
- designed and implemented an automated file generation tool for company-wide use - created UI to bring together data across legacy and current systems to support greater ad hoc testing; developed in Python
- gained interim secret security clearance for project work

weiss tech house | student manager

aug 2017 - present

- oversee the function of the weiss tech house - a resource hub for entrepreneurs
- provide support for startups and founders (e.g., conduct market research)

access engineering | lead teaching assistant

jan 2018 - present

- lead and guide lessons that teach basic concepts across engineering disciplines
- design STEM curriculum for to intellectually stimulate students

first robotics competition - team 11 | design lead

2013 - 2017

- designed critical end effectors and drivetrains on multiple robots
- managed teams of students to properly design parts in Solidworks

projects

find concerts

spring 2020

- worked on a team of three to develop a website that merged ticketmaster concert data with spotify artist data to provide the user an integrated concert finder
- pulled and cleaned data from the spotify api, loaded it into an aws oracle sql database, and designed queries to pull insights from both data sources
- using node.js and react, designed webpages in a user-friendly format

mini-minecraft

fall 2019

- worked on a team of three to develop a customized version of minecraft from scratch using c++ and OpenGL
- designed terrain generation, optimized terrain chunking for speed, randomized river paths and cave designs
- handled user block placement, removal and selection types