



## education

### university of pennsylvania bse | computer science

2017-present

- anticipated graduation: may 2021
- minors: math, data science
- gpa: 3.7 (5 semesters)

### mount olive high school

2013-2017

- class salutatorian
- sat: 2280, act: 34

## coursework

### computation

databases  
computer organization and design  
computer operating systems  
interactive computer graphics  
algorithms  
big data analytics  
networked systems  
computer systems  
data structures and algorithms  
programming languages

### stat/math

simulation modeling  
probability  
computer linear algebra  
linear algebra  
discrete mathematics (cs)

## skills

### languages

experienced:  
python • java • c  
proficient:  
javascript • matlab • c++ • sql

### technologies

git • docker • node.js • react •  
spark • pandas • linux •  
mongodb • neo4j • mysql •  
solidworks • qt creator

## interests

playing soccer, basketball and  
fantasy football, watching and  
reading science fiction.

## experience

### bashpole software | software engineering intern

summer 2020

- will be working on a large codebase developed to help identify and solve human trafficking cases for the US government

### 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, which involves keeping the study space open and providing entrepreneurial resources to early stage startups
- manage and schedule a team of students to run the Weiss Tech House

## activities

### 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 and cad parts

## 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