

## BACKGROUND

Engineer with excellent project management and problem solving skills and a long history of programming currently working to make a career change into software design. Left previous job to focus on transition full time with many months dedicated to refining programming skills through research, self studying, and personal projects.

## PERSONAL PROJECTS

**Pokemon Battle Game** – ~5000 line Pokemon battle game web app with two fully functional teams and an AI to play against.

- Majority of main game mechanics were implemented and web scraping was used to allow use of any Pokemon or move (ignoring any non implemented special move mechanics).
- Program was structured for easy implementation of any new move/ability mechanics with extensive testing coverage. Currently working to develop a React based frontend.

Utilized: Python, Flask, HTML/CSS/Bootstrap, Pytest (Unit and Integration Testing), BeautifulSoup (Web Scraping), Heroku

**Personal Blog** – RESTful web blog where users can create an account/log in, post/edit/delete blog posts, upload a profile picture, and browse blog entries from all other users. Currently using blog to document daily programming progress.

Utilized: Python, Django, HTML/CSS/Bootstrap, AWS S3 file storage, SQLite (Development), PostgreSQL (Deployment), Heroku

**Optimal Pathfinder** – Program with GUI that finds the optimal path between two points.

- User places a start point, an end point, and obstacles on a 2D grid and A\* or Dijkstra's is used to find the most optimal path.

Utilized: Python, Pygame (GUI), Graph Data Structure Theory

**Smart Brain** – Web app with REST API where users can create an account/log in and submit pictures of people for a Clarifai API to identify faces with. Users gain points by submitting photos the API is successfully able to identify faces in.

Utilized: node.js, HTML/CSS/Bootstrap, React, JavaScript, SQLite (Development), PostgreSQL (Deployment), Clarifai API  
Pokemon Battle Game and Personal Blog viewable at [drew-lindstrom.com](http://drew-lindstrom.com). Currently working to deploy other two projects.

## TECHNICAL SKILLS

Proficient: Python, Django, Flask, HTML/CSS, SQLite/PostgreSQL – Comfortable: Java, React, JavaScript – Familiar: C/C++

## ONLINE COURSEWORK

Data Structures and Algorithms, Web Design, Testing, Debugging, System Design, Operating Systems, Computer Networking, Concurrency and Parallelism, Security

- Areas of study listed in order of highest priority and most time dedicated first. All listed areas were learned through online courses and additional self learning.

## EDUCATION

Mechanical Engineering (B.S.) with additional classes in Programming and Product Design  
University of Minnesota, Minneapolis, MN

September 2015 – December 2019  
GPA: 3.224

**Dean's List Fall 2018** - Developed strong project and time management skills while taking three high level engineering classes, two time intensive project based design classes, and staying active with fraternity during said semester.

Alpha Theta Tau – Professional Co-ed Engineering Fraternity

- President, Recruitment Chair, Brotherhood Chair, and Philanthropy Chair
- Extensive experience with presentations as the main presenter of hour long weekly meetings for two semesters while president.

## WORK EXPERIENCE

Donaldson, Bloomington, MN – Applications Engineer

April 2020 – January 2021

- Utilized soft skills, time management, and problem solving skills to assist salesmen as the sole applications engineer for the East Coast sales team. Assisted with technical questions, complex quote requests, and application issues in a high pressure and extremely time sensitive environment.

Scanlan Int., St. Paul, MN – Medical Device R&D Intern

May 2019 – March 2020

- Independently led several projects, including: the development of four different surgical instruments from concept to production/near production, the early development of an instrument tag dispenser, and the implementation of new sterilization trays. Management was often impressed with the ability to manage projects.

Chart Inc., New Prague, MN – Medical Device Co-op Student

May 2017 – August 2018

- Conducted design research in the R&D Medical Device Department on improvements to a liquid nitrogen discharge device, resulting in potential savings of up to \$65,000 per year. Often praised on skills for deep level research.