

Seth A. Fancher

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EDUCATION

University of Michigan, College of Engineering – Ann Arbor, MI (GPA: 3.95) *May 2023 (Expected)*

- B.S.E in Computer Science and Engineering
- Relevant Coursework:
 - EECS 280 – Programming and Introductory Data Structures
 - EECS 203 – Discrete Mathematics

EMPLOYMENT

Introduction to Computers and Programming (ENGR 101) – *Instructional Aide* *Fall 2020 - Present*

- Held weekly office hours to aid students with projects and course material in both C++ and MATLAB
- Proctored and graded student exams in order to assist course directors

Multidisciplinary Design Program – *Software Development Fellow* *Summer 2020*

- Implemented computer vision algorithms for use on video research datasets at UMTRI (University of Michigan Transportation Research Institute) on team DEVIATE
- Constructed a tree-like structure to store and manipulate video objects and their children/attributes in Python

Sensational Spas – *Seasonal Worker* – Stevensville, MI *Summer 2017*

- Monitored pH and cleanliness of customers' spas to ensure their satisfaction

EXPERIENCE

Whirlpool Innovation Challenge *Fall 2018 - Spring 2019*

- Collaborated with a team to engineer and market a new Stand Mixer accessory for KitchenAid
- Presented a business plan and prototype of the product to a team of Whirlpool executives
 - Placed in top ten out of 31 teams

Bridgman Foundation of Educational Excellence Fundraiser *Summer 2017*

- Designed and helped auction decorative shovel to raise funds for Bridgman STEM Lab

PROJECTS - github.com/sethafancher

Go Fish (C++) *June 2020*

- Constructed a Go Fish card game simulator including optional intelligent AI or human players to enhance comfortability with data structures and polymorphism

Personal Portfolio Website (HTML/CSS) *June 2020*

- Created and published a personal portfolio website that includes an introduction, a resume, projects, and contact information

Piazza Post Classifier (C++) *April 2020*

- Designed and implemented a classifier for posts on the Piazza forum using basic machine learning techniques in order to increase comfortability with data structures

Laptop Case with Extendable Tray *January - April 2020*

- Designed and engineered an alpha prototype of a laptop case with an extendable tray to offer college students more work room on small lecture hall desks
- Used MS Project and SOLIDWORKS to manage team resources and create an alpha prototype, respectively

Euchre (C++) *February 2020*

- Designed and implemented a classic Euchre card game simulator including optional human or simple AI players to solidify skills in data structures, object oriented programming, and polymorphism

Content Aware Image Resizer (C++) *January 2020*

- Implemented a program using the seam carving algorithm and basic computer vision principles to intelligently resize images

SKILLS AND TECHNOLOGIES

Proficient: C++ | MATLAB | Git | SolidWorks | Visual Studio | Spanish (four years of experience)

Some Experience: Python | HTML | CSS | Android Studio | MS Project