Benjamin D. Miller

(734) 716-2444 | Canton, MI | millerbd27@gmail.com | github.com/mill2994

EDUCATION

University of Michigan — Ann Arbor, MI
Master of Science and Engineering in Computer Science and Engineering — *Aug. 2022 – May 2024*

Michigan State University, with Honor (3.87/4.0) — East Lansing, MI
Bachelor of Science in Computer Science and Engineering, Cognate in Business — *Aug. 2018 – May 2022*

PROJECTS – BENJAMILLER.COM

Wildfire Risk Forecast Tool, WRiFT | *Python, Flask, HTML, JavaScript* | School
- Semester long capstone project with the Anthropocene Institute, to build an open source, accessible, and educational web based wildfire simulator with **Flask**, targeting at risk areas of California
- Directly responsible for developing an intuitive data entry form created with **JavaScript** and **HTML**, which allows users to prefill historic weather data or select their own parameters
- Calculated environmental, health, and economic costs in **Python** using a data file received from the simulation
- Awarded the Amazon Sigma Award for the top overall project, out of 30 teams

Discord Bot, BenBot | *Python, MongoDB* | Personal
- Used **Python** to develop a Discord Bot which interacts with users and can perform over 10 commands
- Accesses a database in **MongoDB** to store messages, which are automatically retrieved on a specified future date
- Utilizes threads to simultaneously perform time based tasks and monitor incoming messages

Portfolio Website | *JavaScript, React, HTML, CSS* | Personal
- Developed a personal website using **React** and **JavaScript** to highlight my creativity and accomplishments
- Hosted and deployed using **GitHub Pages**, with a custom domain name acquired using Squarespace
- Utilizes **JavaScript**, **HTML**, and **CSS** to create dynamic animations based upon user interactions, including a light versus dark mode, projects expanding upon view, and size adjustments for smaller screen widths

Tower Defense Based Game | *C++* | School
- Developed a **C++** bloons tower defense style game, which uses classes to implement balloons, their movement, player score, and towers, and uses inheritance to extend the properties of the balloons and towers
- Won award for tower creativity, by implementing a Road Runner tower

Multipurpose GPA Calculator | *HTML, PHP* | Personal
- Developed and hosted a web accessible GPA calculator due to the lack of options for the 0.5 grade scale
- Implemented an **HTML** form with two modes: A final GPA calculator, which determines a GPA with new grades added, and a target GPA calculator, to determine grades required to achieve a desired GPA

EXPERIENCE

Data Annotator — Dec. 2023 – Present
DataAnnotation — *Remote*
- Create coding related prompts, in Python, C++, JavaScript, HTML and CSS, for experimental chatbots to reply to over multi-turn conversations
- Analyze responses for efficiency, readability, correctness, and harmfulness
- Compare, select and explain the better of two responses to a prompt, to train the chatbot

Student Manager — Oct. 2018 – July 2022
Michigan State University Culinary Services — *East Lansing, MI*
- Communicated goals effectively with team members and delegated tasks to ensure customer satisfaction
- Assessed needs, such as staffing and supplies, and took action to fulfill these needs for several sites across campus

TECHNICAL SKILLS

Languages: Python, C/C++, SQL, JavaScript, HTML/CSS
Developer Tools: Git, VS Code, PyCharm, MongoDB