Henry Lin

Software Developer | Ann Arbor, MI | (810) 498-8328 | henrlin@umich.edu | Portfolio

EDUCATION

University of Michigan Ann Arbor, MI
Bachelor of Science and Engineering, Computer Science, GPA: 3.43 *September 2019 – April 2023*
Relevant coursework: Game Development, Web Systems, Information Retrieval & Web Search, User Interface Development, Software Engineering, Data Structures and Algorithms, Introduction to Computer Organization
Honors: Dean's List, University Honors

SKILLS

Programming languages: Bash, C++, C#, JavaScript, Python, SQL, Visual Basic
Technologies: Unity, Unreal, Flask, Git, HTML5/CSS, Jinja, Jira, Linux/Unix, React.js, REST
Activities: WolverineSoft, WolverineSoft Studio

WORK EXPERIENCE

KUKA Assembly & Test Corp Saginaw, MI
Software Engineer Intern *July 2022 – August 2022*

- Developed custom interactive manual template for customer's project implemented in HTML, CSS, and JavaScript to be used by the technical writer team for future manuals.
- Devised and set up core features such as interactive diagrams and sortable data tables.
- Proposed use of single HTML page manual to accommodate simpler implementation of document-wide search.
- Participated in regular team meetings and delivered presentations to update supervisor and team members on progress, iterating and making improvement based on feedback and suggestions.
- Wrote documentation for technical writers adapting manual template for later projects.

PROJECT EXPERIENCE

Curse of the Corsair *(C#)* *January 2023 – April 2023*

- Produced a 2D action-adventure RPG game as part of WolverineSoft, a multidisciplinary student-led project team of more than 30 members.
- Collaborated with design, production, and art members in weekly meetings to establish goals and tasks for development sprints, playtest builds, and create bug reports.
- Worked on UI/UX elements such as player HUD, title screen, currency popups, interaction UI, and player hit feedback.
- Resolved over 40 bugs, eliminating over 10 percent of all reported bugs during development.
- Provided technical support for non-programmers on how to use Git, Unity, and modify parameters of C# scripts.

Web Crawler (*Python)* *February 2023 – March 2023*

- Designed a web crawler in Python to extract 2000+ links using the requests library, further parsed to exclude equivalent, duplicate, or invalid (e.g., non-HTML) links.
- Coded a PageRank algorithm to assign page relevance scores according to number of inward/outward links.

Cavelit *(C#)* *November 2022 – December 2022*

- Team project to create a 2D platformer game with the Unity game engine and C# components/scripts.
- Incorporated Agile workflow with weekly milestone deliverables and iterations based on feedback sessions.
- Implemented UX elements such as scene transitions, lighting, inventory displays, etc.
- Contributed to QA and playtesting, including guidance text, level design, and internal testing.
- Produced marketing materials and web presence for game, including itch.io and GameJolt pages and game trailer.

Insta485 *(HTML5/CSS, JavaScript, Python, SQLite)* *February 2022 – March 2022*

- Built an Instagram-clone web application, allowing users to log in, publish posts, and modify existing posts, as well as view and follow other users.
- Implemented server-side dynamic pages by applying the Python Flask web framework and Jinja templates to generate personalized HTML webpages for users based on follower activity.
- Incorporated client-side dynamic pages with JavaScript and the React library, enabling real-time interaction - including liking and commenting - between users and posts.
- Maintained SQLite database storing information such as user login and follow statuses, as well as posts comments, content, and likes.

Maptivity *(HTML5/CSS, JavaScript)* *March 2022 – April 2022*

- Team project to design and create a website to help users find activities and corresponding locations around the Ann Arbor area using the Google Maps API.
- Utilized storyboards and Figma to develop and iterate upon low fidelity prototypes.