# Henry Lin

Software Developer | (810) 498-8328 | henrlin@umich.edu | Portfolio | GitHub

## SKILLS

**Programming languages:** Bash, C++, C#, JavaScript, Python, Visual Basic
**Technologies:** Confluence, Git, HTML5/CSS, Jira, Linux/Unix, SQLite, Unity, Unreal, Visual Studio, Visual Studio Code
**Activities:** WolverineSoft, WolverineSoft Studio

## PROJECT EXPERIENCE

**University of Michigan - WolverineSoft Studios**
*UI Programmer (C#, Unity)*     *January 2023 – Present*
- Collaborated with art, design, and production teams in semester-long multi-disciplinary game project productions.
- Facilitated weekly meetings to regularly test stable builds, discuss implementation and scope details, and establish goals and tasks for development sprints to produce a quality product within a limited timeline.
- Worked with design team to create and iterate upon UI/UX features according to changes in design documentation, user feedback, and asset integration needs.
- Debugged over 40 issues, eliminating over 10 percent of all reported bugs during development.
- Provided technical support for non-technical teammates, providing guidance on source control and in-engine tools.

**Web Crawler** (*Python*)     *February 2023 – March 2023*
- Designed a web crawler in Python to extract 2000+ links by employing 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 amount of inward/outward links.

**Cavelit** (*C#, Unity*)     *November 2022 – December 2022*
- Produced a game for a capstone design experience project, presented at a public expo as an interactive user experience.
- Adapted decoupled systems and UI/UX features to be compatible with other programmers' systems.
- Incorporated Agile workflow by breaking down project timeline into weekly sprints and establishing a feedback loop through hosting regular testing sessions to facilitate iteration throughout development.
- Ensured quality user experience by conducting quality assurance testing and creating stable builds for deliverables.
- Devised marketing materials and web presence for project, including itch.io and GameJolt pages and game trailer.

**Insta485** (*HTML5/CSS, JavaScript, Python, SQLite, React*)     *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 application backend with Flask and a SQLite database to process HTTP requests and generate personalized HTML web pages for users using Jinja templates.
- Incorporated client-side dynamic pages with web components utilizing the React library, enabling real-time interactions such as liking and commenting on user posts.
- Maintained a SQLite database storing information such as login credentials, user profile and follow status, as well as post content and likes.

**Maptivity** (*HTML5/CSS, JavaScript*)     *March 2022 – April 2022*
- Designed and built a website to find notable attractions around Ann Arbor with the Google Maps API.
- Constructed low fidelity prototypes to drive development using storyboards and Figma.

## WORK EXPERIENCE

**KUKA Assembly & Test Corp**     Saginaw, MI
*Intern (HTML, CSS, JavaScript)*     *July 2022 – August 2022*
- Developed an offline web application used to create digital manuals packaged with custom-made assembly and test equipment for clients in the automotive industry.
- Implemented features requested in client specs such as page-wide search, sortable data tables, and interactive diagrams.
- Participated in regular team meetings and delivered presentations to project progress, using received feedback to further iterate and improve on the application.
- Supported nontechnical members with use of the application through individual meetings to walkthrough on usage, as well as writing supporting documentation throughout development.

## EDUCATION

**University of Michigan**     Ann Arbor, MI
*Bachelor of Science in Engineering in Computer Science*     *May 2023*
**GPA: 3.43/4.00**
**Relevant coursework:** Game Development, Web Systems, Information Retrieval & Web Search, User Interface Development, Software Engineering, Data Structures and Algorithms, Introduction to Computer Organization