

Zachary L. Carlson

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Available Spring 2024 for full-time positions and collaborative projects

EDUCATION

University of Cincinnati, Cincinnati, OH

Graduation Date: April 26, 2024

Bachelor of Science in Computer Science

Cumulative GPA: 3.79

Archbishop Alter High School, Kettering, OH

SKILLS

Programming Languages: HTML, CSS, JavaScript, Python, C++, C#, AngularJS, SQL, Java, D3, React

Software & Tools: Mendix, Unity, Advanced Excel, MATLAB, LabVIEW, GitHub, APIs

Areas of Expertise: Machine Learning, Full-Stack Web Development, Software Debugging, Database, Data Analysis, Web-Scraping

WORK EXPERIENCE

Siemens – Strategic Student Program Intern

January 2022 – August 2023

- Enhanced Solution Link with new button tab features utilizing HTML, JavaScript, and C#.
- Addressed and resolved multiple ongoing website issues.
- Introduced new filter and tab functionalities for Solution Link through adept use of HTML, JavaScript, and C#.
- Spearheaded the development of front-end and back-end sections of the company website using HTML, JavaScript, C#, and AngularJS.
- Implemented new features in Solution Link with directives and API integrations.

American Cutting Edge – IT Intern

August 2020 – August 2021

- Developed the entire front-end for a new company website using HTML, CSS, and Magento 2. Led company-wide software upgrades.
- Conducted a price analysis that resulted in significant pricing adjustments.
- Managed inventory on the company website and assisted with warehouse reorganization.

RELEVANT PROJECTS

NBA Predictive Analytics Platform

August 2023 – May 2024

- Led the development of an NBA prediction model with 58% accuracy, using API integration and web scraping for data gathering, and Ridge Classifier for improved stability.
- Directed the launch of a website displaying real-time scores, stats, and betting odds, enhancing user engagement and decision-making.
- Managed the full project lifecycle, from data collection and model training to website launch and maintenance, ensuring platform efficiency and user satisfaction.

Real-Time Group Messaging Application

April 2023

- Developed a multi-threaded server in Java enabling real-time text communication across networks using socket programming.
- Implemented functionalities for user registration, group chats, and personal messaging, enhancing user interaction.
- Employed advanced Java concepts like threads for handling multiple client connections simultaneously and data structures for managing user and group data efficiently.
- Designed the user interface to process and respond to commands like joining/leaving groups, posting messages, and listing online users.

Personal Portfolio Website

June 2021 – August 2021

- Developed a personal portfolio website showcasing my projects and skills, using HTML, CSS, and GitHub Pages.