Alexander Scheibe

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Education

University of Wisconsin - Madison Sep. 2021 – Jan. 2025

Bachelor of Science in Computer Science (Honors) and Data Science *Madison, WI*

- Cumulative GPA: 3.90/4.0
- Sample Relevant Coursework: Object Orientated Programming (Java), Data Structures and Algorithms (Java), Intro to Algorithms (Python, C/C++), Operating Systems (C), Big Data Systems (Python, SQL), Data Science Programming I/II (Python, SQL), Data Modeling I/II (R), User Interfaces (React.js, JS, HTML, CSS)

Work Experience

Full-Stack Software Engineer Jan. 2023 – Present

University of Wisconsin - Division of Information Technology *Madison, WI*

- Develop, test, and maintain dynamic web applications within an agile development framework.
- Employ frameworks like React and Node to architect and implement responsive applications for hundreds of users.
- Collaborate with fellow developers, leveraging GitLab for streamlined version control and efficient teamwork.
- Pioneered and orchestrated a comprehensive overhaul of an existing API and database for employee scheduling, ensuring strict adherence to the Model-View-Controller (MVC) paradigm and a robust RESTful interface.

Data Engineer Intern May 2023 – Aug. 2023

Breakthrough - A U.S. Venture Company *Green Bay, WI*

- Designed, built, and maintained end-to-end data pipelines for ingesting, processing, and transforming raw data into usable formats.
- Revamped data ingestion workflows by creating an automated Excel-to-BigQuery pipeline via GCP services, eliminating manual processing and slashing upload times while ensuring seamless, real-time data integration.
- Collaborated with cross-functional teams, including data scientists, analysts, and engineers, to understand niche data requirements and deliver solutions.

Activities

Computer Sciences Undergraduate Projects Lab Sep. 2021 – Present

- Actively collaborate with fellow students on a diverse range of advanced Computer Science projects.
- Engage in lectures led by guest speakers, covering a spectrum of compelling Computer Science subjects.
- Organize "hackathons" and other thought-provoking events aimed at fostering a vibrant Computer Science community at UW-Madison.

FIRST Robotics Competition Sep. 2017 – Present

- Mentor (2021 - Present) | Team Captain (2020 - 2021) | Lead Programmer (2018 - 2020)
- Engineer robots capable of executing sophisticated tasks, including PID-based autonomous navigation and computer vision.
- Foster an in-depth understanding of advanced development concepts among high school students, employing a hands-on approach within a dynamic scrum-based learning environment.

Projects

NOVA - An Employee Management System | *JavaScript, React.js, Node.js, Express.js, MySQL, Git*

- Web app adopted by UW DoIT to handle tasks such as employee scheduling, attendance, and communication.
- Implemented automated scheduling algorithms to optimize shift assignments and minimize conflicts.
- Implemented an automated and synchronized iCal feed tailored for each employee, enhancing their scheduling and time management experience.

Sparks - A G-Code Editor | *Java, JavaFX, JUnit, FXML, Git*

- Desktop application that allows a user with no experience to write G-Code based on a WYSIWYG model.
- Application utilized in instruction by former high school and presented to U.S. Rep. Mike Gallagher.

Technical Skills

Languages: Java, Python, C/C++, C#, JavaScript, R, HTML/CSS, Bash/ZSH, SQL
Frameworks and Libraries: React.js, Node.js, Express.js, Spring, Django, Pandas/NumPy/Matplotlib, Tidyverse
DevOps and Cloud: CI/CD, GCP (BigQuery, Dataflow, GCS, Cloud Functions/Run), AWS (S3), Docker, Kubernetes
Developer Tools: Linux, Git, Atlasian Suite, Visual Studio Code, Visual Studio, RStudio, MySQL Workbench