Alexander Scheibe

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EDUCATION

University of Wisconsin - Madison   Sep. 2021 – May 2025
Bachelor of Science, Double Major in Computer Science and Data Science   *Cumulative GPA: 3.88/4.0*
- Sample Relevant Coursework: Object-Oriented Programming (Java), Data Structures and Algorithms (Java), Algorithms (Python, C/C++), Operating Systems (C), Machine Programming (C), User Interfaces (React.js), Machine Learning (Python), Artificial Intelligence (Python), Data Science Programming I/II (Python), Big Data Systems (Python, SQL), Statistical Data Modeling I/II (R)

WORK EXPERIENCE

Associate Software Developer   Jan 2024 - July 2024
Sentry   *Madison, WI*
- Engineered a centralized sales and claims data retrieval application in Java Spring and Vue.js for validation of recently submitted data, using Jenkins to build and deploy.
- Led a team of fellow student developers in modernizing a legacy Java app using JSPs with Vue.js.
- Enhanced sales data load times by upwards of 300% through the implementation of an asynchronous processing strategy on client side.

Software Engineer Intern   Sep 2023 - Jan. 2024
Mandli Communications   *Madison, WI*
- Designed a TCP-based network interface to control various vision sensors for detecting cracks in roadways.
- Developed data ingestion streaming pipelines using C++ and Kafka for custom-built LiDAR cameras and pavement sensors, enhancing roadway imaging.
- Created various processing utilities in C++ to scale our pipelines to be compatible with additional data formats.

Software Developer   June 2022 - Sep 2023
University of Wisconsin - Division of Information Technology   *Madison, WI*
- Developed a custom employee management platform utilized by all 350+ DoIT employees.
- Pioneered and led redesign and migration of an existing API and database for employee management, ensuring strict adherence to the Model-View-Controller (MVC) paradigm and a robust RESTful interface.
- Utilized React.js and Node.js for full-stack development of various internal web applications that assist in daily operations such as inventory management and ticket tracking at DoIT.

Data Engineer Intern   May 2023 - Aug 2023
Breakthrough - A U.S. Venture Company   *Green Bay, WI*
- Leveraged Apache Beam to architect a streaming ingestion workflow for B2B clients to send freight data for fuel cost analysis.
- Created an automated Excel-to-BigQuery data pipeline for real-time processing with GCP services, eliminating manual data wrangling, implementing data validation, and providing a dashboard to inform decision-making.
- Collaborated with cross-functional teams, including data scientists, analysts, and engineers, to understand niche data requirements and deliver a pipeline solution for sustainability analysis with existing data in our data lake.

ACTIVITIES

Peer Mentor   Sep. 2023 – Present
CS 537 - Intro to Operating Systems
- Host office hours to directly answer student questions and assist in code debugging for various projects.
- Lead weekly study groups to supplement lecture material and ensure students succeed in the course.

FIRST Robotics Competition   Sep. 2017 – Present
Mentor (2021 - Present) | Team Captain (2020 - 2021) | Lead Developer (2018 - 2020)
- Engineer robots capable of executing sophisticated tasks, including PID-based navigation and computer vision.
- Teach advanced development concepts to high school students, employing a hands-on approach within an agile environment.

TECHNICAL SKILLS

Languages: Java, Python, C/C++, Rust, C#, JavaScript, HTML/CSS, R, SQL
Frameworks and Libraries: Spring, Flask, Django, Node, Vue, React, Sklearn, PyTorch, Hadoop, Boost
DevOps and Cloud: CI/CD, Git, Jira, GCP, AWS, Docker, Kubernetes, Spark, Beam, Apache HTTP Server, Nginx
Databases and Tools: MySQL, MongoDB, Postman, Linux, Maven, CMake, npm, VS Code, Visual Studio, Eclipse