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WORK EXPERIENCE

Root 16 Chicago, IL
Senior Software Engineer *2024 - Present*

- Developed and deployed high-performance Dataverse plugins to enforce business rules and modify data accordingly in real-time within an event-driven architecture.
- Worked on and maintained proprietary data manipulation frameworks used to streamline large-scale enterprise data migrations, incorporating configurable transformation logic and validation.
- Thrived in a fast-paced, accountability-driven environment, regularly managing multiple client projects at once and shifting priorities to meet tight deadlines without compromising quality.

Lakeside Software Ann Arbor, MI
Software Engineer 2021 - 2024

- Added functionality to SysTrack, a system monitoring platform that collects telemetry via OS-level APIs and instrumentation (e.g., WMI, ETW, performance counters), enabling non-intrusive yet high-fidelity insight into endpoint behavior including CPU, memory, disk I/O, and user activity across Windows, macOS, and Linux systems.
- Managed daily tasks involving Azure resources, including debugging, deploying, and monitoring applications in the Azure cloud environment.
- Led the design, implementation, and coordination of new projects and features from conception to deployment ensuring robust and scalable solutions.

FAAC Inc. Ann Arbor, MI
Software Engineer Intern 2019 & 2020

- Developed and debugged new code for FAAC's comprehensive simulation suite, contributing to the advancement of realistic simulation experiences for vehicles ranging from city buses to jets.
- Acquired extensive experience working with software deployed on specialized systems, diverging significantly from typical software design patterns.
- Adapted quickly to new technologies and methodologies unique to the simulation industry, demonstrating flexibility and a strong ability to learn and apply new skills efficiently.

EDUCATION

University of Michigan - Ann Arbor Ann Arbor, MI
College of Engineering
B.S.E. Computer Science *2017* - 2021

- GPA: 3.34/4.00 : Cum Laude
- Dean's Honor List: Winter 2021, Fall 2020, Winter 2020, Winter 2018
- Coursework: Operating Systems, Data Structures and Algorithms, Discrete Math, Introduction to Computer Organization, Foundations of Computer Science, Database Management Systems, Introduction to Machine Learning, Mobile App development, Computer Security.

PROJECTS

System Monitoring Azure Function App (SQL/C++/C#/C++CLI/Azure Resources)

- Developed an Azure Function App designed to monitor systems within an estate for potential issues. This application enabled real-time detection of problems and provided customers with immediate notifications.
- Enhanced vast, existing C++ project for monitoring system health using OS-level APIs and instrumentation hooks.
- Implemented webhook notifications and email notifications to alert customers about detected issues.
- Interfaced a C# project with a large pre-existing C++ project for system monitoring, ensuring seamless two-way communication between the C++ and C# components.

Event-Driven Data Integration (C#/Power Platform/Azure Resources)

- Led full lifecycle development of an event-driven system to automate incremental data migration from a custom external API into Dataverse. The solution identified and processed only changed records to optimize performance.
- Extended internal data transformation tools to support this new pattern, enabling seamless orchestration between Azure Functions and the migration framework.
- Utilized Azure Durable Functions for orchestration, ensuring reliable execution, retry logic, and parallel processing where needed.

ADDITIONAL INFORMATION

Technical Skills: C++, C#, SQL, KQL, RESTful APIs, Git/Github, Java, Python, JS, TS, React, Bash, Azure resources, Power Query, Serverless and Cloud Architectures