
Charlene Orr

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TECHNOLOGIES & SKILLS

Languages: Python, Java, JavaScript, Groovy, C/C++, HTML, CSS, SQL

Frameworks: React, Ruby on Rails, Spring, Django

Technologies/Tools: Git, Jenkins, Jira, REST, Azure, Ansible, Grafana

Skills: Agile Project Management, Mentorship, Public Speaking

EXPERIENCE

Software Engineer at Autodesk

June 2021-Present

Worked with globally distributed scrum teams to develop and maintain the API used by Autodesk flagship CAD products to translate geometric data between file types.

- Worked with CAD product teams to implement highly requested changes to the C++ translation API, saving client engineers thousands of hours.
- Implemented a cross-platform test system in Python to improve speed, maintainability, and analysis of translation and security test results. Designed webpages and dashboards for visualization of the data.
- Wrote scalable CI/CD pipelines using Jenkins and Groovy for cross-platform test and release.
- Documented and executed the official release process for the team's library, including validation of builds before release. Coordinated with multiple clients to triage dependency and compatibility issues.
- Automated translating and visually inspecting hundreds of models for defects. Used a visual similarity score to compare model geometries across source control revisions.
- Created project roadmaps and coordinated sprint work for several concurrent projects as Product Owner.
- Led scrum ceremonies and encouraged Agile practices as Scrum Master.

Software Engineering Intern at Autodesk

May 2020-August 2020

- Helped reduce technical debt in the codebase, creating cleaner, safer, and more efficient code.
- Worked on a code modernization project to use newer features of C++, including lambdas, smart pointers, and RAII.
- Added precompiled headers to speed up build times.
- Used extensive test suite to identify bugs and ensure code quality.

Software Engineering Intern at Lessonly

June 2019-August 2019

- Worked on a cross-functional squad to implement production features used by hundreds of users per day.
- Developed features across the full stack, using React, Ruby on Rails, and Postgres.
- Implemented features for a web tool used by the company to track departmental objectives.
- Designed GraphQL queries to store and retrieve user favorited objectives.
- Integrated with a third-party OAuth library to allow employees to log in with SSO accounts.
- Wrote detailed testing notes for use by other engineers and QA.

PROJECTS

TRACE – a digital footprint tracker

January 2021-May 2021

A privacy-focused tool for discovering, tracking, and sharing your online accounts.

- Built responsive, reusable React components that visualize search results, analytics, authentication, and accounts in the web app.

EDUCATION

Purdue University

July 2017-May 2021

Bachelor of Science in Computer Science

RELEVANT COURSES

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|----------------------------------|-----------------------|-------------------------|---------------------------------------|
| ▪ Data Structures and Algorithms | ▪ Operating Systems | ▪ Software Engineering | ▪ Software Testing |
| ▪ Database Systems | ▪ Systems Programming | ▪ Computer Architecture | ▪ Object-Oriented Programming in Java |