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# Charlene Orr

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## EDUCATION

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### Purdue University

Bachelor of Science candidate in Computer Science

Graduation Date: May 2021 | GPA: 3.43

Relevant courses:

Data Structures and Algorithms

Software Engineering

Object-Oriented Programming in Java

Operating Systems

Systems Programming

Intro to Database Systems

Computer Architecture

Programming in C

## SKILLS

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Proficient in Python, Git, React, JavaScript, C/C++, SQL, Bash, Java, HTML, CSS

Experience with REST, Jenkins, CMake, Django, Flutter, GraphQL, Android, ARM Assembly, Perl

Experience with Adobe Photoshop, Adobe Illustrator, GIMP, Inkscape

## EXPERIENCE

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### Software Engineer and Scrum Master at Autodesk

June 2021-Present

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

- Worked with an automotive CAD product team to implement highly-requested changes to the C++ translation API, saving client engineers thousands of hours.
- Troubleshooted and improved Jenkins CI/CD pipelines for cross-platform test and release of C++ binaries.
- Documented and executed the official release process, including validation of builds before release. Coordinated with multiple teams to triage dependency and compatibility issues.
- Redesigned and rewrote a cross-platform, Perl-based test system in Python to improve speed, maintainability, and analysis of results. Published results to a Grafana dashboard.
- Automated translating and checking hundreds of models for defects. Used a visual similarity score to compare model geometries across source control revisions.
- Led scrum ceremonies and encouraged Agile practices as Scrum Master.

### Software Engineering Intern at Autodesk

May 2020-August 2020

- Worked on code modernization project to utilize newer features of C++, including lambdas, smart pointers, RAII
- Implemented precompiled headers to speed up build times
- Eliminated tech debt in C++ codebase resulting in cleaner, safer, more efficient code
- Used extensive test suite to identify bugs and ensure code quality

### Software Engineering Intern at Lessonly

June 2019-August 2019

Designed and developed a user authentication feature for an internal tool used by the entire company to track departmental objectives

- Learned and implemented GraphQL queries to store and retrieve user favorited objectives
- Implemented a third-party library to allow employees to log in with Google accounts
- Worked on a cross-functional squad to implement production features used by hundreds of users a day
- Developed features across the full stack, using ReactJS and Ruby on Rails
- Wrote detailed testing notes for use by other engineers and QA

## PROJECTS

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### Spotify Last.FM Integration

A Chrome extension that embeds Spotify functionality into the popular music tracking website Last.FM.

The extension uses the Spotify REST API to authenticate the user and interact with their data. This includes the ability to interact with recently played tracks displayed on Last.FM, including dynamically following/unfollowing a track's artist and adding/removing a track to Spotify playlists or the user's music library.