



# Summary

Versatile, team-oriented software engineer with well over 10 years of professional experience. Passionate about modern web development, mentoring junior engineers, and writing reliable, maintainable code. Highly skilled at UI development and bridging the gap between designers and coders. Proficient across all steps of the software development lifecycle in both web and desktop applications.

### Technical Skills

<u>JavaScript</u>, <u>Node.js/npm</u>, <u>TypeScript</u>, <u>React</u>, <u>MUI</u>, <u>Lerna</u>, <u>Nx</u>, <u>Playwright</u>, <u>Git/GitHub</u>, <u>Python</u>, <u>C++</u>, <u>Jenkins</u>, <u>Docker</u>, <u>Qt</u> (especially <u>QtWebEngine</u>), <u>Java</u>, <u>Artifactory</u>, <u>Jira</u>

## Experience

#### **Autodesk**

Principal Engineer (April 2023 - Present) Senior Software Engineer (April 2021 - April 2023) Software Engineer (January 2014 - April 2021) Contractor (November 2012 - January 2014) Intern (Summer 2011, Summer 2010)

#### Weave MUI Toolkit (December 2022 to present)

- Weave is Autodesk's official design system
- Accomplishments:
  - Independently built the Jenkins CI/CD system for automating building, testing (including visual regression testing), deploying a <u>Storybook</u> to <u>GitHub pages</u>, versioning, and publishing to our internal NPM registry
  - Managed the release process for a team of several dozen people, most of whom lived outside the US, across many timezones
  - Mentored junior developers/interns working on the project
  - Wrote the original documentation that became the "getting started" guide
  - Adopted the library early and integrated it into a major UI component in a customer facing application
  - Evangelized adoption of the toolkit through several technical presentations

#### Notification Center (On and off since April 2020 to present)

- The notification center presents, manages, and saves passive pop-up and flyout notifications
- Accomplishments:
  - Acted as the lead (and often sole) developer from project conception to delivery
  - Leveraged React inside a desktop application by using an embedded browser

- Defined and utilized an API for communication between JavaScript and C++
- Developed a system that allows custom messaging to any/all users at will based on a JSON Schema for notifications stored in S3
- Maintained the project over several years, through multiple UI libraries and React versions (including migrating from class based to functional components)
- Formally mentored an intern on the project who was then hired and is now a project lead

#### Innersourced OpenTracing Library (Early 2018 to October 2020 with minor maintenance since)

- Tracing is the process of tagging and following operations as they flow through a distributed system
- Accomplishments:
  - Defined architecture and structure for the library
  - Wrote most of the core code
  - Designed and coded an automated test suite and integrated it with our Jenkins pipeline
  - Refactored the library to be consumable from Node.js or a browser using Webpack

#### Fusion (February 2016 - present)

- Fusion is a 3D parametric CAD, CAM, and simulation desktop application
- Accomplishments:
  - Created several embedded browser UI widgets using Qt and QtWebEngine
  - Worked on improving offline caching, unified logging, synthetic monitoring, and the thundering herd problem
  - Formally mentored a college summer intern

#### Configurator 360 Web and iPad Clients (November 2012 - February 2016)

- © Configurator 360 was a design configurator for the parametric CAD software Inventor
- O Accomplishments:
  - Prototyped a new UI based on <u>AngularJS</u> that became a major component of our app
  - Used three.js to create a model positioning and rotation tool
  - Worked server side with ASP.NET MVC 5
  - As the lead (and usually sole) developer of the iPad app, followed the project from conception through publishing on the Apple app store and maintenance
  - Wrote an STL file parser to load 3D models

### Education

<u>Pomona College</u> - Claremont, CA

Bachelor of Arts 2012 Major: Mathematics Minor: Computer Science