

JEREMIAH JACOBSON

Full Stack Developer

✉ jerejacobson@protonmail.com

☎ 607-207-5737

📍 Cambridge, Massachusetts

🌐 <https://www.jerejacobson.com/>

Experience

Full Stack Web Developer

Pivot Interactives acquired by Discovery Education

📅 2022 – 2024

📍 Cambridge, Massachusetts

- Created front-end components in Vue.js/Tailwinds to be responsive, maintainable, and accessible. Worked on back-end programming in Typescript including routes, permissions, business logic, data aggregates, events, subscribers, etc.
- Worked on creating internal systems for roster management, auto-grading, and LTI communications and integrations with 3rd party systems such as LMS Systems, grading passback, rostering.
- Ownership of features from ticket creation to deployment, including planning, designing, development, user feedback, test coverage, and release.

Senior Software Development Engineer

Corning Inc. - Gorilla Glass

📅 2020 – 2022

📍 Corning, New York / China

- Responsible for training new team members and bringing them up to speed in glass science and our hardware/software stack.
- Programming large-scale and hardened software deployments that are repeatable, reliable, informational, and intuitive for engineers and factory workers.
- Represent Corning Inc. while working closely on consumer electronic solutions with teams from Apple, Samsung, Google, Microsoft, Oppo, and others.

Software Engineer/Metrology Engineer

Corning Inc. - Gorilla Glass

📅 2017 – 2019

📍 Corning, New York / China

- Co-created glass metrology software used in manufacturing environments to quality control Gorilla Glass.
- Improved and optimized QC software, **doubling** the factory measurement throughput.
- Secure the software from reverse engineering efforts and protect the proprietary IP.
- Continued implementing new software features and hardware integrations that the external customers requested.
- Created and developed quality control hardware systems and peripherals with a small team of engineers and scientists.

Knowledge

Languages, frameworks, and tools I actively use

Javascript/Typescript, Vue, MongoDB, Tailwinds, Jest, Playwright, Cypress, Jira, Figma

Flutter Framework and Dart. (iOS/Android/Web/Desktop)

Languages, frameworks, and tools I have used in the past

C#/.NET, WPF/MVVM, LiteDB, Python, PHP, Ruby, Java

Highlighted Work

Randomized data in assignments

- Created a system to randomize assignment question data to be unique for each student while allowing the randomized questions to continue to be auto-graded. The question data would be re-randomized if the student wanted to retry an assignment.

User Signup/Login re-write

- Re-wrote the entire login system from User login components to the routes and logic for SSO integrations, 2FA, switching SSO providers, password reset and different sign-up flows for students and teachers

Supporting Glass Development

- Made significant contributions to the transfer and acceptance of Quality Control Techniques and Software to external finishers for Ceramic Shield, Gorilla Glass 5, 6, Victus, DX/DX+, SR+, and NDA projects.
- Developed software that measures millions of glass displays per day in the United States, China, Vietnam, South Korea, and India. This equates to ~ **3 billion** consumer devices since 2017.

Hardware Automation

- wrote a modular framework to add new hardware components and an interface for 3rd-party automation.
- Automation modularity enabled the software to measure glass samples, laser engrave QR codes into the parts, push data into a database, and then bin the glass parts in a pass/fail criteria.

Patents

- Hybrid systems and methods for characterizing stress in chemically strengthened transparent substrates [WO2020198016A1](#)
- Light source intensity control systems and methods for improved light scattering polarimetry measurements [WO2022212627A1](#)
- Prism-coupling systems and methods having multiple light sources with different wavelengths [US20210157038A1](#)
- Enhanced hybrid systems and methods for characterizing stress in chemically strengthened transparent substrates [US20220276106A1](#)

Education

AAS Computer Information Science.

Corning Community College

📅 2014 - 2016