# **Stephen St.Pierre**

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# Full-Stack Web Application Developer

Versatile software engineer with 6 years professional experience in developing and maintaining JavaScript-based web and mobile applications. Proficient in collaborating with cross-functional teams and implementing responsive design principles to enhance user experience. Adept in conducting thorough testing and debugging to ensure seamless functionality. Passionate about staying up-to-date with the latest technologies and continuously improving skills to deliver high-quality products.

### **CORE COMPETENCIES**

JavaScript ~ TypeScript ~ React.js ~ Node.js ~ AWS ~ Next.js ~ HTML5 ~ CSS3 ~ SQL

## **CERTIFICATIONS**

Amazon Web Services – <u>AWS Certified Cloud Practitioner</u>

Apr 2024

#### **EXPERIENCE AND ACHIEVEMENTS**

Convene, Remote

Oct 2020-Dec 2022

**Frontend Software Engineer** – Lead a team of five engineers to build dynamic work experiences and revolutionize meetings and events through convenient software solutions.

- → Virtual Event Site A React application for meetings and events of any scale, with many options for customization including company branding, live chat, sponsors, breakout sessions, and more.
  - Developed a live chat widget to enable seamless communication between event attendees, sponsors, and support, resulting in increased engagement and satisfaction among attendees and sponsors.
  - Improved user experience by developing an automatic chat user provisioning service for event attendees, resulting in a streamlined registration process.

# → Session Player - A video conferencing application for meetings and events, including common features like moderation tools, live chat, closed captions, screen sharing, and more.

- Conducted an analysis of performance issues using Chrome DevTools and React Developer Tools and successfully implemented refactoring plans to eliminate video lag and UI inconsistencies among participants.
- Spearheaded integrating a lightweight version of the event site live chat widget in a standalone version of the player. This allowed teams to use the application as an alternative to Zoom for ad-hoc meetings, which helped uncover bugs and discover potential new features.
- Led the team in transitioning to modern tooling, which included TypeScript, React 18, and ViteJS, and streamlined the package deployment process. As a result, we achieved a 20% reduction in build and deployment times.
- → UI Library A collection of components with theming consistent with the Convene design system, built with Storybook, React, and Chakra UI.
  - Worked closely with the design team to establish comprehensive design system guidelines including tokens, when to use pixels vs relative units, focus outlines, and accessibility concerns. This initiative improved accessibility compliance scores by 15% across all applications according to Lighthouse.
  - Guided the team in building a robust Storybook with dynamic, customizable components that significantly improved code reusability.

 Streamlined the deployment process of the library by introducing and configuring Chromatic, which also improved team collaboration by allowing designers to visually review the result of code changes.

#### SyncOnSet Technologies Inc., Boston, MA

**Software Engineer** — Simplify work for film studio crews around the world by collaborating with designers and customer service to build tools customers will love.

- → Crew Tools The Emmy Award winning continuity platform. A SPA built with a variety of tools including Typescript, React, Redux, MySql, and Node.js.
  - Leveraged advanced tools like Redux middleware, selectors, and React Grid to create robust, testable, maintainable features including interactive data tables, forms for editing data, and department selection.
  - Collaborated with cross-functional teams in an Agile development process utilizing Scrum methodology to deliver high-quality features and meet project timelines.
- → Asset Hub The first digital system designed for studios to manage physical assets, from production to warehouse to events. A SPA built with Angular, Typescript, MySql, and Node.js.
  - Quickly learned Angular to help build out support for a new client, Warner Bros, with a high volume of assets to track, resulting in successful project completion within the expected timeline.
  - Greatly reduced load times by limiting the number of assets requested at a given time and lazily loading large lists of data.
  - Improved user experience by implementing persisted pagination for the main asset table, allowing users to easily navigate through large amounts of data without losing their place.
- → Crew Tools Mobile An offline-first mobile application built with React Native, Typescript, and SQLite which enables film crews on set to view and enter data about their production in real-time.
  - Implemented designs from scratch to specification for Scenes, Characters, Changes, Looks, Actors, and Sets using the latest techniques such as React Hooks and Context.
  - Simplified the data entry process by developing reusable form components for interacting with changes, looks, actors, and inventory, which also resulted in improved data accuracy.

# Partners Connected Health, Boston, MA

#### June 2016-June 2018

**Programmer Analyst** – Plan and build HIPAA compliant Web and mobile applications to client specifications as part of a Scrum Agile team.

- → SleepyTime Full SDLC iOS app built using React Native which walks parents through the process of sleep training their child as part of a research study to determine the technique's efficacy.
  - Researched and recommended most suitable open-source tools, significantly increasing speed of development and ensuring a timely release.
  - Built controller for notifications around starting the bedtime routine and checking in about progress, which ranked as the second most complex feature.
  - Contributed a new feature to an open-source npm package which was core to the application, avoiding major loss of development time.
  - Advocated using ES6, ES7, and ES8 techniques to achieve more elegant, readable implementations.
- → Stencil Full SDLC Cross-platform (iOS, Android) React Native app which allows participants to take recurring surveys as part of a research study. It is integrated with a HIPAA compliant data-capturing Web application called REDCap so that researchers can easily manage their survey(s) and interact with the resulting data in a familiar way.

#### Aug 2018-Aug 2020

- Championed best practices such as component prop validation, code styling based on the Airbnb guidelines, and a new structure of unit testing with Jest, enabling greater test visibility and less bugs during development.
- Architected dynamic components such as the survey questions and survey itself to handle the many different types of questions a researcher could ask, saving hundreds of lines of code.
- Implemented cross-platform controller for notifying participants about their surveys, saving ~50 lines of platform-specific code.
- Developed and deployed an HTTPS enabled Node.js application server, complete with Nginx reverse proxy, to store sensitive data like our REDCap API token and project identifiers, adding 3 vital layers of security.
- → **Diabetes Management Web Portal** Provide a responsive front-end experience using Bootstrap and jQuery to help clinicians monitor diabetes patients through data integration and visualization.
  - Collaborated with an external team to negotiate and confirm most scientifically accurate requirements, supplying data which clinicians voted was substantial.
  - Leveraged FHIR API and database as a back-end for patient data in compliance with federal HIPAA medical data privacy and security regulations.
  - Performed system tests on portal and integrated mobile app to uncover critical bugs before releasing the application.
- → *iTrack Fitness* Full SDLC Automated script which integrates with a machine learning model to precisely predict study participants' levels of physical activity, and encourages participants to consistently meet their activity goals.
  - Lead development of a range of features from a Node.js implementation of REDCap's API, to the aggregation of that data, as well as integration with a machine learning model written in R.
  - Devised an innovative system applying REDCap, Twilio, Fitbit APIs, and OAuth2 protocol for patient data storage in compliance with federal regulations, intervention text messaging, monitoring physical activity data, and authentication.
  - Wrote UML and technical design documentation which later contributed to a research paper.

# Residential Networking, Bridgewater State University, Bridgewater, MASeptember 2014–May 2016Residential Networking Technician

- Manage campus network infrastructure and residence hall equipment
- Leverage enterprise support and collaborate with senior technicians to solve advanced networking issues

Information Technology, Bridgewater State University, Bridgewater, MA

### Senior IT Consultant

• Assist customers with a variety of technical issues, tracked using a ticketing system, and manage campus equipment

# **Education**

Bridgewater State University - B.S. in Computer Science, Minor in Mathematics

August 2012—May 2016