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 — **AWS Certified Cloud Practitioner**   April 2024 - April 2027

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 SPA built on top of Wordpress. A unique site is deployed for each customer customized for their company branding and event needs.
  - ◆ 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.
  - ◆ Rewrote the existing chat widget using the Stream SDK, TypeScript, and MobX, which reduced costs by 20% and increased maintainability by 25%.
  - ◆ Improved user experience by developing an automatic chat user provisioning service for event attendees, resulting in a streamlined registration process and higher engagement levels.
- ➔ **Session Player -** A video conferencing package which can be added to any JavaScript application.
  - ◆ Conducted in-depth analysis of performance issues in existing implementations and successfully implemented refactoring plans to eliminate video lag and UI inconsistencies among participants, resulting in a 40% improvement in overall video call quality and a 25% increase in user satisfaction.
  - ◆ Spearheaded integrating a lightweight version of the event site live chat widget in the standalone version of the player, resulting in a 15% increase in user engagement and a 10% increase in overall player usage.
  - ◆ 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 and a 30% increase in code maintainability.
- ➔ **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 resulted in a 20% increase in design consistency across all applications and improved accessibility compliance scores by 15%.

- ◆ Guided the team in building a robust, organized Storybook with dynamic, customizable components that significantly improved code reusability and reduced development time by 30%.
- ◆ Successfully streamlined the deployment process of the library and improved team collaboration by introducing and configuring Chromatic, resulting in a 50% reduction in deployment time.

SyncOnSet Technologies Inc., Boston, MA   **Aug 2018—Aug 2020**

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** - Companion to the Web app and rebuild of the old mobile app with React Native, Typescript, and SQLite.
    - ◆ 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, resulting in a 20% reduction in data entry time and improved data accuracy.
    - ◆ Optimized the loading of large datasets, including images, resulting in a 30% reduction in load times.

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.
    - ◆ Designed novel component architecture without Redux, reducing bundle size by 4.3%
    - ◆ 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
    - ◆ Developed new feature for an npm package in use, 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.
    - ◆ 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 50% more test visibility and 25% 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
    - ◆ 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 Twitter 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 deploying to production.

- ➔ *iTrack Fitness* - Full SDLC - Automated script which precisely predicts study participants' levels of physical activity, and encourages participants to consistently meet their activity goals.
    - ◆ Lead development of a range of features from an original Node.js implementation of REDCap's API, to the aggregation of that data, as well as integration of an external algorithm 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, MA   **September 2014—May 2016**
Residential 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   **August 2012—May 2016**
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