Principal Software Engineer

Full-Stack Development | Scalable Architecture | API Design & Integration | Technical Leadership & Mentorship

PROMISE: Elevate engineering excellence by fostering collaboration across distributed teams. Lead high-impact development with a focus on scalable, maintainable solutions.

TARGET: Adapt seamlessly across languages, platforms, and architectures to improve code quality, streamline workflows, and mentor teams. Excel in offshore collaboration while aligning technical execution with business objectives.

RESULTS: Deliver measurable improvements in code quality, performance, and maintainability—accelerating development speed and team efficiency for global enterprises, including Microsoft and Bank of America.

AGILE DEVELOPMENT & TECHNICAL LEADERSHIP · SCALABLE, MAINTAINABLE ARCHITECTURE · CODE QUALITY, REVIEWS & BEST PRACTICES · PERFORMANCE
OPTIMIZATION & TUNING · SYSTEM DESIGN & PROBLEM-SOLVING · OFFSHORE & DISTRIBUTED TEAM COLLABORATION

-KEY IMPACT & INNOVATIONS

- Designed an extendable charting system for the Expenses admin dashboard, anticipating future reporting needs. This abstraction enabled seamless historical data integration later, reducing development effort and avoiding a costly refactor.
- Reengineered a failing function to fully automate version tracking, improving reliability from 0% to 100% and reducing file size by 99% for optimal network efficiency.
- Redesigned a key workflow to match existing user patterns, reducing user effort by 33% while minimizing support
 overhead.
- Identified an automation opportunity immediately upon joining the company and independently designed a bookmarklet to streamline Craigslist postings, reducing user interaction by 90%. This unexpected innovation enhanced efficiency, improved customer satisfaction, and strengthened the company's competitive position

-TECHNICAL SKILLS-

Programming: Java, Python, C#, .NET Core, Node.js

Frontend & UI Development: React, Redux, AngularJS, TypeScript, JavaScript (ES6+), CSS/SASS, Bootstrap, Responsive Design

Backend & API Development: .NET MVC, Web API, Microservices, RESTful Services

Databases & ORM: MS SQL Server, MySQL, Entity Framework, NoSQL

Cloud & Platforms: Microsoft Azure, AWS, Windows, Linux, macOS, Cloud-Native & Serverless Architectures

DevOps & Source Control: Git (SourceTree), TFS, Subversion (SVN), CI/CD (Azure DevOps)

Testing & Automation: NUnit, Jasmine, Gulp **Tools & IDEs:** Visual Studio, ReSharper

-CORPORATE EXPERIENCE-

Global Payments (Xenial) | Charlotte, NC

Senior Software Engineer, 2025 – Present

Scope: Troubleshot and enhanced existing POS device integrations within a restaurant-focused POS ecosystem running on tablets and purpose-built hardware.

Developed solutions using Angular, TypeScript, and Cordova/Kotlin, leveraging hardware SDKs when available and API-based integrations as a fallback.

Wrote and maintained automated tests with Protractor, contributing to the team's migration toward Playwright for future test coverage.

Collaborated in an Agile/Scrum environment with product management and peers; participate in peer reviews, providing and receiving feedback on every pull request.

Investigated production issues by analyzing AWS-hosted logs via Elasticsearch/Kibana; deploy custom Android builds to local devices for rapid validation.

Utilized REST APIs, JSON, Git, Jira, and Jenkins-based CI/CD pipelines to deliver and maintain robust integrations.

iSolved | Charlotte, NC

Senior Software Engineer, 2020 – 2024

Scope: Designed an extendable charting system for the Expenses admin dashboard, anticipating future reporting needs. This abstraction enabled seamless historical data integration later, reducing development effort and avoiding a costly refactor.

Juan Boyce

Page 2 | (415) 595-3163 | juan@boyce.tech | linkedin.com/in/juanboyce

Created micro front-end applications with Node.js, Angular 14, and .NET Web API, enabling modular and scalable design.

Collaborated closely with a teammate developing the admin interface to consume templates, helping unblock challenges while simultaneously developing the template creation system. This ensured seamless integration between both components and accelerated feature delivery.

Coordinated with an offshore vendor to review and QA deliverables, ensuring adherence to coding standards, functional correctness, and maintainability.

Participated in project planning, providing technical insights and architectural guidance to streamline development and align with business goals.

KEY PROJECT: Designed and developed groundbreaking HR servicing application (dynamic UI for client-level user reports) using Azure Service Bus, Knockout JS, and microservices. **Results:** Redesigned a key workflow to match existing user patterns, reducing user effort by 33% while minimizing support overhead

Mark 43 | Charlotte, NC

Senior Software Engineer, 2018 – 2019

Scope: Collaborated with team to build mission-critical software using React, Redux, TypeScript, Node.js, and npm. Wrote Java API endpoints to interface with MySQL and AWS Lambda for efficient data handling and integration. Implemented real-time updates and communications using Web Sockets to enhance application responsiveness.

KEY PROJECT: Added chat/messaging feature to CAD application. Utilized Electron and Docker for containerization. **Results**: Delivered seamless user experience across platforms and improved communication for first responses.

Square One Solutions/ Optimity Advisors | Culver City, PA

Senior UI Developer, 2015 – 2016

Scope: Worked primarily as front-end engineer using AngularJS while debugging and improving backend APIs built with C# for seamless integration and functionality. Operated in Scrum Agile environment, contributing to code reviews and developing unit tests with Jasmine to maintain high code quality.

KEY PROJECT: Developed "SCORE," application for assigning and managing camera crews for Olympic events. The application integrated scheduling, time logging, and payroll functionalities.

Market Track | Chicago, IL

Software Engineer, 2013 – 2014

Scope: Integrated open-source and third-party libraries into internal applications to extend functionality and optimize processes. Collaborated with offshore teams in Jamaica and India, coordinating tasks and integrating data processing workflows across time zones.

KEY PROJECT: Created console app in C# to download and process newspaper flyer inserts. **Results:** Reduced manual data entry and streamlined database updates. Researched and implemented computer vision libraries to automate object recognition in flyer images. **Results:** Minimized human workload and improved data processing efficiency. Created spatial proximity search extension in SQL Server. **Results:** Enhanced data querying capabilities.

-HIGHLIGHTED CONTRACTS-

My CRE Buddy (EdTech Startup) | Remote

Software Architect & Lead Engineer, 2025

Scope: Transformed a no-code demo into a fully functional Al-powered SaaS product, establishing the startup's technical foundation. As the sole developer in a bootstrapped, founder-funded startup, designed and implemented a Flask/Python backend and a responsive frontend UI using Vanilla JavaScript, Bootstrap, and the company's brand style guide. Developed system architecture, API integration, and deployment strategy while leveraging Al-assisted pair programming to accelerate development and improve code quality.

KEY PROJECT: Developed a Flask-based backend that connects to Anthropic's Claude API, implementing a streaming API to improve perceived latency by displaying responses in real-time. Built secure authentication with email + password login, ensuring a solid foundation for future payment integration. Added database-backed conversation storage using MySQL to enable multi-session persistence. Designed and built a fully branded, responsive UI for a seamless user experience.

Results: Transformed a no-code prototype into a full-stack AI-powered SaaS platform, supporting client demos and onboarding. Enhanced user engagement by implementing a streaming API, allowing responses to be displayed in real-time instead of waiting for full completion. Built secure authentication and user management using email + password

Juan Boyce

Page 3 | (415) 595-3163 | juan@boyce.tech | linkedin.com/in/juanboyce

login, providing a foundation for future payment integration. Implemented SQL-based data storage using MySQL to ensure a scalable and maintainable architecture. Contributed to client acquisition by ensuring a seamless live demo, proactively monitoring for issues, and validating product stability, which helped secure buy-in. Utilized Al-assisted development for rapid prototyping, debugging, and code generation, accelerating development while maintaining highquality standards.

Bank of America | Charlotte, NC

Application Developer V, 2016 – 2018 & 2024

Scope: Completed multiple contracts requiring collaboration with cross-functional teams. Enhanced CI/CD pipeline for internal tools/assets. Quickly assessed and resolved technical challenges within short-term contracts. Used Gulp, Jenkins, and REST APIs to implement continuous integration pipelines and enhance deployment workflows.

> Utilized AngularJS, Kendo UI, Breeze, and TypeScript for UI development with C#, .NET MVC, Entity Framework, and SQL Server 2014 for backend implementation.

Key Projects: Project #1: Reengineered a failing function to fully automate version tracking, improving reliability from 0% to 100% and reducing file size by 99% for optimal network efficiency. Impact on DevOps: Enabled DevOps teams to automate version tracking, eliminating manual processes and boosting productivity.

Project #2: Led full development lifecycle of permissions management tool, gathering business requirements, designing system architecture, and creating detailed documentation. Impact to Business: Streamlined permission updates and reduced manual tasks by designing and integrating bulk selection functionality and building secure access control features and advanced permission management techniques.

Microsoft | Charlotte, NC

Software Design Engineer, III 2019 – 2020

Scope: Maintained and enhanced backend C# applications, incorporating stakeholder feedback to align with business requirements. Debugged code, worked within team of 8 engineers, participated in code reviews and Agile workflows to deliver high-quality features on schedule.

KEY PROJECT: Enhanced customer-facing chatbot with Azure Cognitive Services, implementing multi-language support and real-time translation, improving global accessibility and user satisfaction. Refactored existing code for maintainability and documented new processes. Wrote automated tests. Results: Enabled global accessibility and improved user satisfaction, ensuring inclusivity and compliance with accessibility standards. Streamlined future development efforts, improved software reliability, and reduced errors.

TVGLA & The HQ | Los Angeles, CA

Web Software Engineer & Freelance Front-End Developer, 2016

Scope: Deployed production-ready applications and enhanced usability with keyboard shortcuts and multi-select functionality.

KEY PROJECTS: Project #1: Built responsive website for Popstar: Never Stop Never Stopping using Foundation Framework, Node.js, Gulp, SASS, and CSS3, with advanced animation and social media API integration.

> Project #2: Developed taxi service web app with Google Maps, geolocation, and MongoDB and added real-time communication via Slack. Created additional mobile application using Mobile Angular UI, LESS, and Gulp. Results: Accelerated development with modular components.

-EARLY CAREER HIGHLIGHTS-

UI Developer, *Yield Technologies* | Chicago, IL

Identified an automation opportunity immediately upon joining the company and independently designed a bookmarklet to streamline Craigslist postings, reducing user interaction by 90%. This unexpected innovation enhanced efficiency, improved customer satisfaction, and strengthened the company's competitive position.

Web Developer, Questus | San Francisco, CA

Leveraged self-study of XSLT to complete delayed front-end projects, bringing team back on track and guaranteeing timely project completion or delivery ahead of schedule.

-EDUCATION & CERTIFICATIONS-

B.S., Computer Science (in progress), Western Governors University Accelerated program; anticipated completion 2025 Linux Essentials Certification (LPI), Linux Professional Institute September 2025