

Christopher Barr

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Accomplished technical hands-on leader with 20+ years of experience delivering enterprise and consumer-oriented software and database solutions. Excels working in team-based agile environments and enjoys providing mentorship to less experienced developers with an engaging coaching style. Generalist with experience across entire stack and DevOps with the flexibility to task-switch between lead, generalist, and specialized roles.

Christopher lives in South Jersey with easy commutes to Philadelphia and the surrounding areas.

Johannesen Consulting, Inc. *Freelancer*

October 2020 - Present

Johannesen Consulting, Inc. (JCI) is a consulting agency specializing in web application development for a variety of customers across e-commerce, marketing, and social media technologies. It is a 100% remote-first organization consisting of multi-disciplinarian software engineers. Most recent project I've contributed on:

Adapti | <https://adapti.io/>
Lead Engineer

Frontend: *VueJS 3, TailwindCSS, TypeScript*
Backend: *.NET 6, c#, Postgres, Docker, Azure DevOps*

Designed, developed, and maintained a web application which allows Adapti business leads to mine Instagram Influencer and Amazon product data. The software integrates with multiple external third-party APIs including [Apify](#) for social media influencer lookups and [Keepa](#) for Amazon product analysis. The software is built with a modern front-end and integrated with a backend API and Hosted Worker Service. The applications are delivered via Azure DevOps CICD to staging and production environments, making use of Docker containers, Azure Web App Services, Static Web Apps, Container Registry and Worker Services.

American Water *Senior Software Engineer Contractor*

October 2020 - Present

Member of a 14-person engineering team responsible for the development and testing of various .NET Framework projects, as well as a .NET core greenfield application. The team consists of contractors and full-time employees, of which I am the most senior contractor responsible for leading a 4-person set of contractors and 1 full time employee.

- Sole engineer for a .NET Core set of services for integrating legacy monolith and external API via messaging over Amazon Managed Streaming for Apache Kafka (MSK).
- Onboarded, led, and mentored a 4-person team which was staff augmented from an external company to assist our team with enhancements of our legacy monolith.

- Stood out from other contractors by participating in code reviews, performing production releases, collaborating with business to standardize Jira story writing, over communicating status and fostered a fun, engaging and safe place for learning and asking questions.

CrossBridge Health

February 2020 – October 2022

Principal Software Engineer

Led the technical design and development of CrossBridge's flagship product, from inception through a working prototype. Using this prototype, potential customers can view the system and understand the value that it offers to their organization. As an engineering leader in a start-up setting, Chris also oversaw the day-to-day administration and troubleshooting of CrossBridge's environment, its cloud and hosting infrastructure, and provided general assistance to non-technical members of the organization.

- Balanced engineering excellence against customer and shareholder value under budgetary constraints while architecting the product and collaborating with ownership on its design.
- Developed and tested a prototype system of clients, libraries, services, and databases to position the company for Series A investment.
 - The modern web, customer facing client was written in VueJS / Vuex and TailwindCSS with HighChartsJS data visualizations and supports multiple device resolutions.
 - The front-end communicates via Apollo client to a .NET Core GraphQL services API.
 - The services API leverages Entity Framework for read, persistence, and migrations against a PostgreSQL database.
 - A TypeScript client SDK for external partners which provides real-time employee health records (EHR).
 - A NodeJS socket server acts as real-time intermediary between front-end and external partners for EHR data, specifically [Particle Health](#) via client SDK.
 - Maintained multiple build and deployment pipelines in Azure DevOps for continuous integration and delivery to Azure Cloud.
- Performed migration from GoDaddy Active Directory & Office 365 to Microsoft Azure subscriptions.

Prime Technologies

October 2019 – February 2020

Software Development Manager

As Prime Tech's software engineering manager, Chris oversaw and mentored a team comprised of professionals of various career levels and re-established Prime Tech's engineering culture. He also had responsibility for guiding the architecture and development of Prime Tech's flagship product, spanning both front-end and back-end technology stacks.

- Refactored front-end to make use of modern web development techniques such as
 - Media queries for responsiveness
 - TailwindCSS utility-first styles
 - Push towards SPA with partial page updating via AJAX requests

- Replacing jQuery with vanilla JavaScript and targeting evergreen browsers
 - Bundling and minifying static resources
- Developed and tested an MVVM WPF client which allowed operators to send and receive information to external hardware devices.
 - Leveraged Prism event aggregator for pub/sub.
- Performed one on one sessions with direct reports, listened, and provided feedback to guide career paths towards their interests while balancing against business vision and technology roadmap.

Scala

August 2017 – August 2019

Senior Software Engineer > Dev Manager

Responsibilities include mentoring others on best practices for DevOps and product development, learning and prototyping new technologies and reporting on the feasibility of their implementations within our ecosystem of technologies. Led the efforts of improving processes by implementing the following: SDLC, peer code reviews, automated deployments to development environments, software versioning strategies, and embracing a fail fast, fail often culture.

- Led the successful implementation of a dashboard-based analytics solution across 4 teams, working across time zones and Slack for communication.
 - Set the direction for a uniformed data capture strategy in multiple systems to loggly.com and provided guidance and code snippets for integration to Loggly API.
 - Coded, tested, and deployed via CircleCI to AWS S3 a front-end website written with VueJS and ChartJS for the visualization of data metrics.
- Worked with designers and developers to define a software development life cycle and governed its use thereafter.
- Mentored less experienced engineers regarding best practices and performed code reviews to ensure coding standards conformity.
- Implemented development environment in AWS for static file hosting and created a CICD strategy for static front-ends via CircleCi & Github.
- Helped guide an existing team towards creation of a reusable React/Redux component library, to foster not only code reuse but also the team's understanding of versioned software and implementation via shared private NPM.
- Prototyped real time data visualization for Omron Human Vision Component for IoT on Azure leveraging Event Hubs & Streaming Data Analytic jobs.

August 2015 – August 2017

HealthQX | Change Healthcare

Tech Lead > Development Manager

Responsible for the architectural design, development, and testing of HealthQX's flagship product in a fast paced, fluid environment. Role included ownership of development operations, setting architectural direction, leadership and mentoring of development team.

- Led the successful transition and stabilization of product, technology, and people to comfortably reside within McKesson and Change Healthcare governance and oversight.
 - Team contributor in the creation and implementation of SOC II Type II controls and processes across SDLC and people management.
 - Led the development and delivery of multiple post-acquisition flagship product releases.
 - Built a team of curious, independent, highly motivated professionals of all skill levels.
- Core architect and software development contributor to ClarityQx (CQX). CQX is a business intelligence Software-As-A-Service (SAAS) cloud-based product that allows stakeholders and business analysts to mine a fast, aggregated, analytical model of their claims-based data via a single page application user interface of charts, data-grids and helpful hints.
 - CQX is a Microsoft .NET based N-Tier MVC Web Application along with several services built on ASP.NET Web API.
 - The software was valuable enough to help position HealthQX to be acquired by a Fortune 5 company.
- Introduced, contributed to, and enhanced Software Development Life Cycle (SDLC) with Continuous Integration and Delivery (CICD) strategy - allowing stakeholders to review features as developed in a fast, repeatable, reliable process.
- Managed a small team of developers consisting of 4 direct reports.
 - Conducted monthly one on one sessions.
 - Implemented code review and pair programming exercises
 - Introduced and trained in the use of Kanban based Agile Methodology to manage work efforts.

PointRoll

August 2014 – August 2015

Senior Software Engineer / DevOps Lead

Responsible for the development of new and existing applications in a Scrum environment. Role included leadership and mentorship of the development operations team consisting of 7 onshore and 30 offshore developers.

- Led the development efforts of a 5-person Scrum team in the creation, testing, and deployment of an ASP.NET MVC application used by internal stakeholders to streamline the creation of HTML5 advertisements used in legacy applications.
- Partnered with stakeholders to identify and translate business requirements into simple user interfaces. This work effort resulted in an 800% increase in internal end-user productivity and significantly decreased the resource cost and time required to provide client services. The development proceeded in an iterative fashion with continuous integration which allowed for repeatable and reliable delivery to stakeholders and encouraged early and frequent feedback.
- Led a new Development Operations Systems team and introduced CICD for a portfolio of 20+ applications.
- Streamlined Software Configuration Management (SCM) policies, provisioned build servers & agents (TeamCity) along with deployment servers & tentacles (Octopus Deploy). Through

automation, we reduced deployment times from ~5 days to less than 30 minutes on a per application basis and reduced errors previously caused by manual processes.

- Analyzed and reorganized a development environment consisting of 90+ virtual machines (VMs) down to 33 VMs. Saved ~8 TB of storage space and introduced guidelines & naming conventions for predictable, semantically meaningful identification of VMs.

Caesars Entertainment

August 2013 – August 2014

Senior Software Engineer / DevOps Lead

Consulted for Caesars Entertainment Corporation as a member of their Web Channel Services team. Responsible for maintenance, enhancements, and testing of Caesars' online hotel reservations applications across 45+ national properties, their online Customer Total Rewards program, and their online voucher redemption application.

- Enhanced the user experience of the administrative interface using Bootstrap and ASP.NET MVC 4.0. Focused on shortening user response times via minification, AJAX for smaller request sizes and resource bundling.
- Designed and developed a mobile-first responsive web design application which allows on-site employees to track customer voucher redemptions (Buffet of Buffets, VIP Club Rooms, etc.).
- Partnered with business and marketing teams to mockup a new user experience for the "My Account" areas of totalrewards.com.
- Designed and developed a Single Page Application experience driven by backbone.js & HTML5 which communicated with a .NET backend acting as a pass-thru to existing Java based RESTful APIs - giving the impression of faster load times.

eMaint Enterprises, LLC

June 2012 – August 2013

Principal Software Engineer

Principal developer of a software delivery team responsible for design, development and maintenance of eMaint's Cloud-based Software as a Service (SaaS) products. Worked closely with Vice President of Technology & Chief Architect to strategize the development of new products and subsequently led the development team in their implementation. Developed a new front-end user interface of flagship product, helping eMaint win the 2013 SmartCEO Leader in Technology Voltage Award.

- Spearheaded development of next generation multi-lingual, multi-tenant platform founded on Domain Driven Design, Command Query Responsibility Segregation, Asynchronous Messaging driven by Microsoft Azure cloud services (regional hosting & caching, load balanced virtualization).
- Led development efforts on a new responsive web application targeting a RESTful .NET Web API acting as a bridge to legacy application services. Increased response times of pre-existing screens by 250%.

- Oversaw development efforts of new single page application interface for Chevron field employees to survey customers via a mobile first responsive web design application, utilizing media queries and code reuse for easier maintainability.

JBS Solutions

February 2009 – August 2012

Senior Software Engineer

Key contributor of a delivery team that assisted the company growing from 9 employees to more than 50 within 3 years placing it in the Philly Top 100 Fastest-Growing Companies. Developed and maintained desktop and web applications in both Windows and Linux Stacks.

- Lead an offshore team from India and Brazil; provided guidance and direction in design, development, and maintenance of .NET web and WCF applications.
- Successfully launched a global e-commerce application, modaoperandi.com, within a six-month window.
- Developed a Django & Python services layer for multiple iOS applications.