Ashok Balakumar

Full Stack Software Developer

Greater Tampa Area
(857) 930-8110
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EXPERIENCE

Sensitech (Carrier), Beverly, MA
Full Stack Software Engineer
December 2022 – July 2024

- Actively involved in building SensiWatch platform using Angular 14.0 framework interfacing with C# APIs built in Microservices architecture on .NET 6.0 development platform.
- Swiftly resolved on-call production support tickets from the Agile Kanban board, unblocking customers within a 48-hour turnaround using New Relic for monitoring and diagnostics.
- Analyzed real-time log data from Azure EventHub and Azure Service Bus, including queued and dead-lettered messages, to debug defects in services deployed on Azure Cloud.
- Crafted Kusto Query Language (KQL) queries to consolidate stack trace data from Application Insights into meaningful result sets, enhancing clarity and comprehension.
- Ensured secure, high-performance REST API controllers adhering to SOLID principles, design patterns, and industry compliance standards with a focus on scalability and performance.
- Designed reusable wrapper controls and transformed Web UI inputs from template-based to custom-themed reactive controls, leveraging TypeScript and RxJS in Angular to enhance data binding, flexibility, and user experience.
- Managed deployments of containerized applications using AKS and Azure DevOps, packaging with Docker for local and production environments, and administering Kubernetes cluster pods via the kubectl command-line tool.
- Performed extensive testing by developing hundreds of UI unit tests with Jasmine and Karma, along with API unit tests using xUnit and NCrunch for Fact and Theory methods, ensuring high-quality, reliable code.
- Worked in an 8-person Agile Scrum team with both on-site and offshore team members adhering to Scrum protocols including sprint planning, backlog refinement, story pointing, daily standup and sprint retro.

Sprague Energy, Portsmouth, NH
Senior Developer
July 2022 – October 2022

- Constructed and executed SQL queries and Stored Procedures against proprietary Safari and NatGas relational database entities to extract and clean up data in preparation for nGenue billing system integration.
- Incorporated new fields and hyperlinks to dx-data-grids across NatGas presentation layer and wired to back-end for data retrieval and upserts.
- Fixed consumer facing issues by debugging logic across all layers of NatGas application.
- Deployment of applications to Azure Cloud using Azure app Service PaaS infrastructure.

Anaqua, Boston, MA
Consulting Software Engineer
February 2021 – July 2022

- Mentored team members and documented HTML and CSS style guides to facilitate the conversion of the presentation layer for acquired Quantify IP products (Estimator Online and Portfolio Estimator) to align with Anaqua's styling standards.
- Translated VB6 code to C#.NET during rewriting of legacy Global Estimator and Portfolio Estimator desktop applications.
- Implemented SSL/TLS encryption to ensure secure data transmission, including the generation and management of security certificates for enhanced system security.
- Enhanced Estimator Online reports with a zoom cropper and PDF generator using open-source libraries, improving user experience for generating printable report estimates.
- Utilized AJAX and Bootstrap components to deliver a dynamic and visually appealing interface while reducing server postbacks, significantly enhancing the performance of various application-specific features.
- Enhanced client and server-side validation and error handling across all ASP web pages of Estimator Online.
- Debugged and Tested code in ASP and C#.NET while using Tortoise SVN as a source control tool.
- Exclusively responsible for developing CSS selectors for UI web control design and layout across the entire application.

Dassault Systèmes, Waltham, MA
Consulting Software Engineer
November 2019 – January 2021

- Transformed UI and scalability of proprietary Post-Split configuration WinForms application to an IIS Web Forms application incorporating Bootstrap and AJAX Control Toolkit for a superior look and feel.
- Rewrote logic for much of the C# source code in Post-Split configuration tool to correct errors in product builds following periodic Stream Splits.
- Implemented UI dashboards and console applications to streamline 3DS media uploads that ran off a daily schedule.
- Acted as a key interface between client stakeholders and engineering teams to gather requirements and deliver API solutions that exceeded expectations.

SKILLS

Languages: HTML, CSS, SASS, JavaScript, jQuery, C#, SSRS Ruby, SQL, N1QL, C, Java, Visual Basic, MATLAB

Web Development: ASP, .NET Core, ASP.NET MVC, ASP.NET Web Forms, Angular, Vue, C#.NET, VB.NET, NuGet, AJAX, Azure Cloud, Azure DevOps, Azure Service Bus, Azure EventHub, AKS, PaaS, Perforce, SOAP, REST, NPM, React, New Relic, NCrunch, Jasmine, Git

Methodologies: Agile Scrum, Kanban

Database: MS SQL server, Stored Procedures, Views, Triggers, Entity Framework, ADO.NET, PostgreSQL, MongoDB, Couchbase, Elasticsearch, Mongoose

Applications: MS Visual Studio, MS Office, MS SQL Server Reporting Services, Beacon Spyglass, Redgate, Windows Task Scheduler, JIRA, Confluence, FogBugz

CERTIFICATIONS
General Assembly:

Web Development Immersive Certificate of Completion

Coursera Course Certificates:

Java Programming: Solving problems with Software

Programming foundations with JavaScript, HTML and CSS

Front-End Web Development with React

EDUCATION
The University of Texas Arlington, Arlington, TX

BSc Electrical Engineering

Overall GPA: 3.44/4.00

Inducted into Tau Beta Pi engineering honor society, Eta Kappa Nu electrical and computer engineering honor society, and Golden Key International honor society for scholastic merit.

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EXPERIENCE (CONT.)

Triumvirate Environmental, Somerville, MA
Software Developer
March 2018 – November 2019

- Transitioned existing Entity Framework platform from EDMX to Code First, across all major projects, to comply with EF7 and EF Core support.
- Updated NuGet package dependencies throughout the solution post-conversion, resolving associated compile-time errors to maintain system integrity.
- Transformed Triumvirate's paper-intensive manifest submission process by developing an e-Manifest API to integrate with US EPA's web API thus reducing submission costs, minimizing systemic errors and providing real time feedback.
- Responsible for full-stack development of several workflows involving multiple stages of approval.
- Adopted Dependency Injection with StructureMap in ASP.NET MVC for principled Object-Oriented programming.
- Applied Singleton design pattern across application interface layers during feature development.
- Displayed competence in all stages of the Software Development Life Cycle.
- Utilized SQL Server data tools to develop reports in Visual Studio.

Techbiz Africa, Nairobi, Kenya
Web Application Developer
March 2016 – October 2017

- Clients included reputed multinationals headquartered in Kenya, including H-Young & Company (http://hyoung.com) and Craft Silicon (https://www.craftsilicon.com).
- Developed "Hello Kenyan" web portal in ASP.NET web forms to provide a platform for public experience during 2016 elections. This was used by the Government of Kenya to monitor regions prone to violence during post-election strife.
- Enhanced performance of XML reports in Visual Studio for major financial institutions including Barclays and Prime Bank through Craft Silicon's Bankers realm electronic fund transfer (BREFT) channels system.
- Enhanced Data Access layer resolving CRUD actions from ADO.NET to LINQ facilitating lazy loading and separating business logic from data access by limiting stored procedure calls.
- Bug fixes and user-interface enhancements.

Benefits Management Group, Oak Brook, IL
Web Application Developer
January 2014 - December 2015

- Created the SQL stored procedure that ensured data compliance with new Employer provided 1095-C insurance coverage form.
- Saved operational costs by utilizing open-source C# libraries to automate transfer of union files between a shared network drive and remote client servers via SFTP.
- Developed and implemented the user interface for a demo application used by company CIO to attract prospective clients.
- Generated and validated application reports using SQL Server Reporting Services (SSRS).
- Gathered knowledge on the company's domain of operation and business requirements.

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