

John Boal

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Senior Software Developer, Development Manager and Team Leader

Summary

I am a team member, mentor, development manager and lead on high-performance teams - helping others to achieve and maintain success. I improve customer experience delivering better software, frequently. I resolve challenges by leading my team with collaboration, innovation, and technology. I help ensure quality, frequent, automated, valuable software delivery. I facilitate customers, stakeholders, and team members to collaborate efficiently and effectively and deliver better software.

Experience

Consultant/Software Engineer	Orcas Consulting	04/2025 – Present
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Full-stack software Engineer for a Fortune-100 client working on data collection, deployment and management of IoT devices and related services. Software development in C#, Python, JavaScript/Typescript, SQL/NoSQL for device applications and cloud services.

Engineering Manager	Launch Consulting	11/2020 – 10/2024
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Manager role in addition to software development. Experience with various clients including Vision Service Plan and Microsoft working on team efficiency, software quality, engineering design and architecture. Numerous projects including design and implementation of full-stack microservices-based applications and middleware in C# based on VBD (volatility-based decomposition) architecture. Designed APIs for FHIR/HL7 specifications. Maintained large-scale Azure ETL data aggregation platform engines in C#. Worked on AI chatbot applications prototypes for clients using Azure AI services for RAG and semantic kernel in C#.

Principal Software Engineer	Premiera Blue Cross	04/2017 – 11/2020
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SecDevOps Azure cloud Developer and Agile Evangelist. Designed, built and supported fully automated CI/CD and scalable Azure-function microservice-based applications, leading a high-performance development team. Supported hybrid web/mobile application. Worked mostly on back-end with C# RESTful APIs using SQL Server, Cosmos NoSQL, and Azure ADF pipelines, with some support also for web client using React with JSX and Typescript. Developed customer service feedback application that used Angular front-end and AI natural language model (SLM) design, with training and deployment for sentiment analysis, using ML.NET framework (pre-OpenAI) in C#.

Principal Software Engineer	Ciber Inc.	07/2010 - 04/2017
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Development lead also acting as Agile Coach for high-performance hybrid on/off-shore development team at T-Mobile. Facilitated an agile DevOps culture throughout the organization, while delivering quality software. Led trainings across the development org to improve agile transformation, Scrum, XP, Kanban/lean with TDD and full automation in CI/CD. Raised the quality bar providing training/education for developers and project management. Increased trust and collaboration between customer, management and dev teams. ELT/ETL process design, both Win32 thick client application design and web-based app design in C#.

Senior Software Development Engineer	Velocity Partners	2008-2010
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Served as Consultant and Development lead for small embedded team for an internet software development client. Helped guide the client in their quest to apply agile software development and project management techniques to a once-waterfall shop. The product was a web 2.0 SaaS website for project management. Raised the quality bar with TDD, quality control, security, and quality assurance for the entire organization.

Senior Software Development Engineer

Accenture (was Solutions IQ) 2007-2008

Senior engineer and led small teams in delivering software in C#/T-SQL, for mostly middleware REST APIs and back-end services for various clients. ETL and SOA architecture, automated DevOps CI/CD automation design in build and deployment pipelines. SOA application development using SOAP web services architecture.

Senior Software Development Engineer

Microsoft

2003-2007

C# Object-Oriented Software Development using Extreme Programming (XP), Test-Driven Development with .NET NUnit/XUnit test framework. Designed highly effective automated test suites. Solutions Architect - overall system architecture, as well as subsystem and component design. Served as Security Champion (local security touchpoint and tier-1 security expert for the entire organization). Led Threat Modeling and conducted Security Reviews for multiple projects. Web services development (C#, T-SQL, SOAP), APIs. Designed enterprise data transformation ETL (Extract, Transform, Load)/ELT processes.

Skills

C#, SQL, Python, React, TypeScript/JavaScript. Node.JS front-end/back-end, ETL/ELT pipeline design and implementation, CI/CD automation, Test-Driven Development (TDD), Lean, Scrum, Extreme Programming (XP), Secure DevOps, SQL, Snowflake, Kubernetes, AI (ML, NLP, prompt engineering). Fluent in many Azure and AWS cloud PaaS and IaaS components and offerings. Experience designing cloud-first, microservice and event-based messaging architectures with Azure Service Bus, RabbitMQ, Kafka as well as cloud-based CI/CD pipelines: Azure DevOps YAML, GitHub Actions, TeamCity, nAnt, MSBuild, Cruise Control, Hudson for build and deployment. AI experience using Azure AI and OpenAI APIs, with semantic kernel client and chatbot coding experience using these APIs and services. Some experience in AI small language model (SLM) construction, training, evaluation and tuning.

People management, mentoring and team leadership experience delivering quality software on high-performance teams. Software engineering design, architecture, object-oriented principals, VBD [volatility-based decomposition] architecture. Data pipeline design using streaming and microservices, Docker container-based architecture, Kafka, Snowflake, AWS Redshift, Azure SQL, Azure Data Factory, Cosmos NOSQL DB, and MySQL. Azure Message bus, Azure event hub, Rabbit MQ. Proficient in build automation and deployment pipelines using Azure DevOps (YAML), GitHub Actions, TeamCity, nAnt, MSBuild, Cruise Control, Hudson, Jenkins. API development (C#), API Management using Azure APIM, Tyk, Ocelot. Product Owner skills - prioritizing stakeholders needs, focused on customer value delivery. Requirements Definition, Analysis, Design, Implementation, Debug, Testing and Acceptance. OS experience with Windows 11 and all prior, Linux and other Unix. In the past – many years of C, C++, assembler coding experience. ETL/ELT data pipeline design and implementation on various platforms and technologies. Source control with Git, GitHub, BitBucket, Azure DevOps, TFS. Workflow and project management and ticketing systems Jira, Confluence, Azure DevOps.

IP network design, Electronics Engineering, circuit design, PCB design and layout with various CAD software systems including Cadence and DipTrace. Can design, analyze and build electronic and computer circuits, digital, and analog (solid-state, low frequency) circuits and DC power supplies. Mechanical/part engineering, design and layout using various 2D and 3D CAD software, 3D object design with Autodesk Fusion, FreeCAD, Sketchup, Blender. Can design, analyze and build RF radio antennas up to UHF band. Can read and produce machine drawings for mechanical parts.

Education

Bachelor of Science Degree in Computer Science - California Polytechnic University Pomona 1991

Certification in AI - Microsoft Azure AI Fundamentals 2024

Certification in Object-Oriented Programming - California State University Fullerton 1993

Certification as Scrum Master (CSM) - Scrum Alliance 2005