

# Software Development Manager

## About Building Bloc

Building Bloc is a frontier technology company with potential to revolutionize the healthcare supply chain through agile, modular, and on-demand manufacturing. Our platform integrates advanced manufacturing, real-time data systems, and secure, low-footprint software to improve operational efficiency in resource-constrained environments. We specialize in deployable micro-factories with predictive analytics and hardware integration, enabling rapid, resilient response to healthcare needs anywhere.

## Job Description

We're hiring a Software Development Manager to lead the design, delivery, and evolution of our microfactory MES platform that serves as the central UI and data hub for deployable microfactories. You will own the roadmap and architecture, guiding a high-performing team to build secure, resilient, hardware-integrated systems that operate in low-bandwidth and offline-first environments. You will manage and develop an offshore engineering team, coordinating execution across time zones to deliver through them. You will drive distributed service architecture and design choices, performance to accelerate quality and build a scalable, service-oriented platform for our customers.

You are expected to manage the roadmap, propose, align, and communicate trade offs to generate the optimal value to customers, providing timely visibility to all stakeholders including senior leadership. Partnering closely with product, hardware, firmware, and manufacturing, you will align priorities, communicate trade-offs, and deliver outcomes for high-trust customers. You'll build strong engineering practices and manage on-call with a focus on fault tolerance and well-tuned alarms. As a people leader, you'll hire, mentor, and grow diverse talent, fostering an inclusive, collaborative culture with clear ownership and consistent execution. The successful candidate will be able to deal with ambiguity, have a passion for problem-solving at scale, and will need to be operationally/technically strong.

## Key Responsibilities

- Architect & Lead Large-Scale Technical Solutions Own the end-to-end design of complex, distributed systems — from broadly defined business problems to production-ready architectures that scale to large customers.
- Own the technical roadmap, architecture, and tool selection for the microfactory MES platform
- Own cross-functional projects, including product definition, roadmap/resource planning and project execution.

- Lead, coach, and manage onshore/offshore teams; coordinate execution across time zones and deliver through the offshore team
- Drive end-to-end delivery from ideation to operations; set priorities, communicate trade-offs, and hit milestones
- Integrate hardware data from 3D printers, sensors, and controllers via REST, MQTT, and Modbus RTU
- Optimize performance, reliability, and scalability for low-bandwidth, offline-first, and edge environments
- Build and maintain CI/CD pipelines, packaging, deployment, and edge delivery workflows
- Ensure operational excellence: on-call readiness, incident response, root-cause analyses, and observability
- Uphold security, documentation, and compliance (e.g., secure SDLC, RBAC, IEC 62304, ISO 13485)
- Deliver real-time telemetry, alerting, and visualizations across web and desktop clients
- Hire and develop talent; foster an inclusive, high-ownership engineering culture and best practices

## Qualifications

- 8+ years of professional software development experience across full SDLC: code reviews, source control, CI/CD, testing, operations
- 3+ years of engineering team management experience (hiring, mentoring, performance)
- 3+ years designing/architecting distributed, scalable, multi-tier systems
- 3+ years of experience managing team across different time zones and deliver through offshore teams
- Knowledge of engineering practices and patterns for the full software/hardware/networks development life cycle
- Expert, hands-on cloud experience (AWS/Azure/GCP), containers/Kubernetes, serverless, and IaC (e.g., Terraform/CloudFormation)
- Practical GenAI usage in the SDLC (code assistants, test/data generation, CI automation) and building LLM-powered features (prompting, RAG, evaluation, guardrails)
- Proficiency in both web-based and desktop application development
- Exposure to IoT, edge computing, or embedded systems, hands-on with MQTT, serial comms, and USB/COM interfacing
- Knowledge of secure development practices and regulated workflows (e.g., medical/defense)
- Experience deploying applications in constrained or offline-first environments
- Experience partnering with product/program management and communicating with senior leadership
- Experience in recruiting, hiring, mentoring/coaching and managing teams of Software Engineers to improve their skills, and make them more effective, product software engineers

## Technical Skills

- Languages and Frameworks: C#, .NET 6/7/8, and other front and backend dev tools
- Protocols and Integration: REST API integration, MQTT, Modbus RTU, USB/serial interfaces, ROS2 and OPC UA an asset
- Architecture and Patterns: SOLID, async/await, event-driven programming, dependency injection
- Data and UI: Real-time data visualization, alerting, UI state management, secure user access, observable collections, command binding
- Deployment and Ops: CI/CD pipelines, version control via Git/GitHub
- Security and Compliance: Secure SDLC, role-based access control, familiarity in regulated domains (IEC 62304, ISO 13485)

## Why Join Building Bloc?

- Impact: Help deliver life-saving manufacturing capabilities to the world's most resource-constrained environments
- Velocity: Work on a fast-paced team solving meaningful problems with urgency and creativity
- Mission: Contribute to a company focused on resilience, decentralization, and technological self-sufficiency

## Equal Opportunity

Building Bloc is an equal opportunity employer and welcomes applications from candidates of all backgrounds. If you're excited by complex technical problems and driven by purpose, we'd love to hear from you.