Paul Borgen

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Profile

Results-driven and highly resourceful professional with hands-on experience in leading project operations, developing deliverables, and directing diverse teams to ensure project success.

Proven track record of managing projects from initiation to completion within established timelines while maintaining compliance with quality standards. Skilled in analyzing and modifying existing software, designing patterns, testing applications, and supporting systems to fulfill customer requirements. Highly motivated in project execution, with the ability to work effectively both independently and within teams to deliver best-in-class solutions to customers and organizations. Clear communicator with a strong ability to build relationships across all levels of management, stakeholders, clients, and vendors.

Skills

Software Architecture	System Design	Team Leadership	AI
Claude Code	Codex	LLM's	DAG
LangChain	Speckit	Mentoring	Collaboration
CI/CD Pipelines	Terraform	Python	GoLang
TypeScript	Java	Bash	Smart Contract Engineering
Blockchain Data Processing	Computer Vision	Automated Testing	Mongo
MYSQL	Postgres	Oracle	

Work Experience

05/2025 – present
USA

Principal AI Engineer
Alopex

Leading technical architecture and strategy for next-generation healthcare platforms that revolutionize care coordination in medical organizations.

- Architected scalable, HIPAA-compliant, multi-tenant patient management systems on AWS using GoLang, TypeScript, TanStack, and Vite to power secure care coordination across medical organizations.
- Designed and built an AI-powered clinical chat interface leveraging AWS, LLMs, vector databases, and Directed Acyclic Graphs (DAGs) to provide nurses with real-time, context-rich patient summaries, dramatically improving situational awareness and decision-making speed.
- Designed secure authentication, role-based access control (RBAC), and intelligent workflows for referrals, eligibility verification, and care team coordination while maintaining strict data privacy standards.
- Drove AI strategy and implementation of intelligent features that enhance patient outcomes, reduce administrative burden on clinical staff, and streamline operations in complex healthcare environments.

07/2021 – 03/2025

Co-Founder / CTO
Mintra

Leading a global distributed team to build all aspects of the NFT marketplace. Utilized Slack and Jira for effective communication and project planning. Mintra exemplifies

Work Experience

innovation and technical expertise, emerging as the leading NFT marketplace on Pulsechain.com. The platform, fully developed in-house, combines sophisticated backend architecture, robust smart contract engineering, and intuitive user experience design.

- Built an LLM-powered NFT recommendation engine that analyzed user behavior, collection traits, and on-chain activity to deliver personalized NFT suggestions, significantly improving user engagement and discovery on the platform.
- Leveraged modern AI development tools (including Cursor) to accelerate software development velocity, enabling faster iteration, code generation, and higher-quality output across the engineering team.
- Ensured all smart contracts underwent a full audit and have proven secure to date, using Foundry and Hardhat with a comprehensive suite of unit tests.
- Architected a data pipeline that has processed millions of NFTs and tens of thousands of collections.
- Developed a distributed locking workflow capable of processing blockchain data in a distributed, deterministic manner.

02/2020 – 07/2021
United States

Software Engineering Consultant
Precision Point Systems

Engaged to evaluate and refine a sophisticated computer vision system designed for precise tracking of a football on the field. This project leveraged advanced C / C++ / GoLang programming to manage an array of high-resolution cameras monitoring the game in real-time. Our task involved capturing images from these cameras and employing a custom AI model that I trained to determine the exact position of the football with pinpoint accuracy. OpenCV was integral throughout this process. This initiative not only showcased cutting-edge technology in sports analytics but also expanded the capabilities of computer vision applications in dynamic environments.

- Stabilized the system for reliable use during live games.
- Successfully deployed the system for UCONN football games at Rentschler Field.
- Achieved measurement accuracy down to the pixel level from the camera, equivalent to approximately half an inch.

06/2016 – 02/2020

Advanced Software Engineer (Solutions / DevOps / Analytics)
Honeywell

Developed and maintained multiple external interfaces within metering infrastructures. Executed key operations including database design, performance optimization, and backend development. Strengthened security by enhancing the enterprise security API (ESAPI) and reducing vulnerabilities to XSS and XSRF attacks. Drove performance improvements through efficient SQL queries and advanced threading strategies.

- Updated several backend applications to utilize Spring and Hibernate, resulting in a simplified architecture and faster turnaround times in subsequent sprints.
- Customized and applied ESAPI implementations to enhance security across all business suite applications.
- Led security reviews by analyzing penetration testing reports and implementing required fixes.
- Introduced unit testing methodologies and strategies to improve code quality within the team.
- Migrated the codebase from SVN to GIT to streamline version control workflows.
- Created a CI pipeline using Jenkins, enabling end-to-end automation in the continuous integration process.
- Led distributed teams and innovated SDLC and communication methods to enhance collaboration and delivery.

07/2012 – 06/2016
Raleigh-Durham, North Carolina Area

Senior Software Engineer
Honeywell

Developed and maintained multiple external interfaces within metering infrastructures. Executed key operations including database design, performance optimization, and backend development. Enhanced security by advancing the enterprise security API (ESAPI) and reducing vulnerabilities to XSS and XSRF attacks. Drove performance improvements through efficient SQL queries and threading strategies.

Noted Accomplishments:

- Updated several backend applications to leverage Spring and Hibernate, resulting in

Work Experience

simpler architecture and faster sprint turnaround times.
- Customized and utilized ESAPI implementation to strengthen security across all applications in the business suite.
- Introduced and established unit testing methodologies and strategies within the team.
- Migrated the codebase from SVN to GIT.
- Created a CI pipeline with Jenkins and enabled end-to-end automation in the CI process.
- Led offshore teams over multiple years within a Scrum SDLC environment.

06/2010 – 07/2012

Web Application Developer
CARQUEST Technologies, LLC

Worked on innovating the auto parts inventory and management system by analyzing existing VB6 applications to understand data flow. Migrated and integrated this data into a J2EE application I developed, utilizing a combination of Java and PLSQL to enhance data processing speed.

08/2008 – 06/2010

QA Team Lead
Pratt & Whitney

Spearheaded the automation of testing processes for applications processing real-time jet engine data via FADEC (Full Authority Digital Engine Control). Collaborated closely with aerospace engineers to gather and refine testing requirements, ensuring alignment with engineering objectives and operational constraints. Translated engineering requirements into detailed test plans, leading the team through manual testing to validate application performance. Designed and implemented comprehensive automation suites by converting manual test plans into automated tests, significantly enhancing efficiency and reducing error rates. Managed team workflows, delegated tasks effectively, and facilitated seamless collaboration between testers and engineers to deliver robust, reliable testing solutions.

- Maintained a testing suite in Mercury Quality Center.
- Validated 4 J2EE applications.
- Developed detailed Test Plans.
- Created a Java program to verify database population accuracy.
- Collaborated with top Aerospace and Mechanical engineers to define testing requirements.
- Built testing suites using VBScript (QTP) and later Selenium for automated functional testing.

Education

Computer Science | Bachelor of Science - BS

Central Connecticut State University

Certificates

AWS Certified Cloud Practitioner

AWS Certified Solutions Architect - Associate

Certified Ethical Hacker
EC-Council

http://www.eccouncil.org/Certification/certified-ethical-hacker

Hobbies

Golf

Gym

Pickleball