PAUL BORGEN

Lead Software Engineer (Architect, BigData, Building the future)
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Professional Summary

Results-driven experienced CTO and lead software engineer with a strong background at all layers of the software stack.

Proven ability to lead technical teams in developing innovative solutions, with a focus on driving strategy and operational efficiency. Skilled in software design, testing, and project execution, ensuring timely delivery of high-quality solutions. Adept at working with diverse teams, building strong relationships with stakeholders, and delivering customer-focused outcomes. Seeking a leadership role that combines technical expertise with hands-on involvement.

Expert at analyzing and modifying existing software, designing patterns, testing applications, and supporting systems to meet customer requirements.

Highly motivated for project execution with innate ability to work in a team to deliver most best-in-class solutions to customers and companies.

Clear communicator with an innate ability to establish strong relationships and with all levels of management, stakeholders, clients, and vendors.

Professional Experience

Mintra (https://app.mintra.ai)

Co-Founder / CTO 07/2021 - Present NFT Marketplace / Analytics

• Co-founded and led the development of Mintra, the leading NFT marketplace on Pulsechain.com, driving innovation and technical excellence in the crypto and blockchain sectors.
• Directed a globally distributed engineering team, implementing agile methodologies via Jira and Slack to ensure seamless communication, project management, and alignment with business goals across different time zones.
• Designed and built the platform's entire backend architecture from the ground up, focusing on scalability, high availability, and security to support millions of NFTs and transactions.
• Authored and audited all smart contracts, ensuring the highest levels of security and reliability by using tools like Foundry, Hardhat, and comprehensive unit testing to validate code integrity and protect the platform from vulnerabilities.
• Devised a distributed data pipeline capable of processing millions of NFTs and thousands of collections efficiently, leveraging a distributed locking workflow for processing blockchain data in a deterministic and scalable manner.
• Led product development and strategic initiatives, integrating user feedback to continually improve the user experience (UX/UI) and align with emerging trends in the Web3 and decentralized finance (DeFi) sectors.
• Actively collaborated with stakeholders, investors, and cross-functional teams, balancing technical leadership with business acumen to ensure alignment on key objectives, timelines, and innovation roadmaps.
• Drove continuous innovation in blockchain technologies, including layer-2 solutions, smart contract optimization, and decentralized marketplaces, positioning Mintra as a market leader.

Precision Point Systems

Lead Software Engineer 02/2020 - 07/2021 Computer Vision

• Lead the development and optimization of an advanced computer vision system to track the real-time movement of a football on the field, utilizing C/C++/GoLang, OpenCV, and custom AI models.
• Successfully deployed the system during live UCONN football games, ensuring sub-inch precision in tracking, a critical feature for in-game analysis and decision-making.
• Integrated AI and machine learning to improve system accuracy, reliability, and performance, demonstrating the practical application of AI in live sports environments.
Provided technical leadership for a cross-functional team, overseeing the end-to-end development cycle, from data capture through image
•processing to final deployment in live events.

Professional Experience

Honeywell

Advanced Software Engineer (Solutions / DevOps / Analytics) 06/2016 - 02/2020 Smart Grid

• Managed and led Big Data and DevOps projects, driving automation and scalability within Honeywell's energy solutions, focusing on smart meter infrastructures and IoT-enabled systems.
• Architected a highly scalable data ingestion and processing pipeline that processed billions of data points from smart meters using AWS, Python, Dask, Pandas, and Parquet, optimizing performance for real-time energy analysis.
• Built automated CI/CD pipelines and deployed complex Kubernetes applications to AWS, reducing deployment times and improving operational reliability.
• Provided insights to customers by identifying gaps and anomalies in their electrical grid data, allowing for proactive measures to reduce energy consumption and costs.

• Led a DevOps transformation, introducing automated deployment strategies and streamlining operational workflows to improve collaboration and efficiency across the engineering teams.

Honeywell

Senior Software Engineer (R&D) 07/2012 - 06/2016 Smart Grid

• Led backend development and infrastructure projects, improving performance and security across smart metering systems by implementing Spring and Hibernate frameworks for a more scalable and efficient architecture.
• Championed security improvements through ESAPI (Enterprise Security API), implementing advanced measures to reduce vulnerabilities such as XSS, SQL injection, and cross-site request forgery (XSRF).
• Successfully migrated the organization from SVN to Git, significantly improving version control efficiency and establishing best practices for distributed teams.
• Automated the CI/CD pipeline using Jenkins, which resulted in faster development cycles, fewer errors, and improved collaboration between development and operations teams.
• Introduced unit testing frameworks, improving code reliability and reducing post-deployment errors.

Carquest Auto Parts

Senior Software Engineer 06/2010 - 07/2012 Company Description

• Modernized the company's auto parts inventory management system by migrating legacy VB6 applications to a new J2EE-based platform, increasing the system's efficiency and scalability.
• Developed custom data processing tools using Java and PLSQL, which significantly reduced processing times and improved data accuracy for real-time inventory updates.

Pratt and Whitney (Now Raytheon)

Automation Lead 08/2008 - 06/2010 Aerospace

• Led the automation of testing procedures for jet engine performance data analysis, developing testing frameworks for FADEC (Full Authority Digital Engine Control) systems.
• Designed and implemented automated test scripts using VBScript, QTP, and Selenium, which significantly reduced manual testing efforts and improved test accuracy and coverage.
• Collaborated with aerospace engineers to create robust test plans, ensuring that testing aligned with real-world operational requirements and regulatory standards.
• Maintained a testing suite in Mercury Quality Center.
• Responsible for the validation of 4 J2EE applications.
• Test Plans Created a database checking java program to validate that the DB was getting populated with the correct data. •
• Interacted with some of the best Aerospace and Mechanical engineers to gather testing requirements.
Created a testing suite using VBScript (QTP) and later Selenium for automated functional testing.

BenefitsXML

J2EE Engineer 04/2006 - 08/2008 Healthcare

• Worked on a healthcare benefits management application written with J2EE technology.
• This was a startup and a small team which gave me exposure to how a software company works a crossed all roles and disciplines. •
This position involved working with J2EE technologies including Struts, XSLT and Servlets.
• Worked as part of an agile development team in a fast pace environment with aggressive deadlines.
• Played a pivotal role in the development of a healthcare benefits management platform using J2EE, Struts, XSLT, and Servlets. Worked across all layers of the tech stack in a fast-paced startup environment.
• Automated unit and functional testing suites using JWebUnit and HTMLUnit, reducing development cycles and improving overall product quality.

Aetna Insurance

Junior Software Developer 02/2004 - 04/2006 Insurance

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Developed a data ingestion and cleansing application for actuarial data, transforming large datasets into actionable insights for enterprise wide usage.
•
Streamlined data workflows by building custom tools in VB6, reducing errors and processing times, improving overall data quality for business intelligence applications.

Skills

System Design Architecture AWS Solidity Typescript Python GoLang Java C++ C Foundry Hardhat Cryptography NodeJs OpenCV Computer Vision Linux Bash Automation Unit / Integration Testing Docker Distributed Systems Data Structures GitHub Gitlab Jenkins MongoDB Oracle Postgress PLSQL MySql J2EE Spring Hibernate

Education

Central Connecticut State University - Bachelor of Computer Science

Certifications

AWS Certified Solutions Architect

AWS Certified Cloud Practitioner

Certified Ethical Hacker – INFOSEC