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Software Development Manager

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in John R. Ailor

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Experience

Sr. Software Development Engineer

Amazon Inc

2019-01 / Present

Concentrated on Amazon Device Reverse Logistics, re-Architected existing hard-coded warehouse systems to a configurable AWS server-less architecture

- Rearchitected core services of the team into a configurable orchestration service to replace the hard-coded workflow system
 - Managed project work, including resource management across nine team members, ensuring timely delivery of projects for business users
 - Re-used existing services where applicable, altered to run a server-less architecture, producing a 45% response time reduction on page load
 - Worked with dedicated operational supply chain partners, and business partners to collect requirements, ensuring coverage of all use cases
 - Oversaw the deprecation or migration of six legacy systems, including developing zero downtime data migration and backup plans
- Launched a new return center to accommodate the release of major new product initiatives and the expected increase in returns
- Maintained an engineering team of nine developers, guiding the integration of Third-Party Retailer Device Returns and condensing operational lines by 30%
 - Demonstrated customer obsession and ownership to ensure project alignment with customer needs and long-term goals of organization
 - Expanded services to include management of returns from third-party device resellers, increasing operations available for all returns services
 - Maintained a world-class team by coaching and developing engineers, fostering a culture of pragmatic engineering decisions and mechanisms
 - Collaborated with stakeholders, and accounting teams to ensure compliance and smooth project release, demonstrating strong cross-functional skills; delivered with no value loss
 - Wrote weekly business updates for senior management review and monthly reports for senior director review from both technical and business teams
- Served as the leader in definition and development of multi-tier web services for 5+ years, reducing legacy servers by 85% , migrating to a serverless stack
 - Highlighted invent and simplify by introducing innovative solutions that simplify architecture; reducing sources-of-truth to one
 - Migrated existing service stack to server-less technology, AWS ECS running on Fargate, to ensure scalability and unified deployment across all regions
 - Established Infrastructure-as-code practices (CDK), to reduce technology burden of adding a new region from four months down to four weeks
- Re-imagined team's agile process to include procedures and mechanisms to guarantee success; reduced sprint rollover by 65%
 - Insisted on the highest standards by re-imagining agile processes; realigned mechanisms to guide success, adapting agile strategy to fit team dynamics
 - Implemented new story and ticket procedures, Story Bar Raiser, stressing quality and traceability, including a rubric and templates for highest standards
 - Presented new mechanisms for ticket procedures at company wide conference on best practices for writing
 - Reviewed and provided feedback on stories and ticket before the introduction to the sprint, ensuring compliance with team standards
 - Developed a new formula for sprint capacity estimation, utilizing a moving average of goals met versus capacity estimated; integrated product stakeholders into sprint planning
- Introduced new tenants and goals for testing procedures to target critical bugs within the existing architecture, decreasing escaped defects by 50%
 - Re-designed functional tests to span across multiple services, focusing on customer stories from the business requirements
 - Implemented integration tests to ensure dependent services respond as expected during automatic pipelines deployments
 - Automated bug ticket monitoring system to organize the incoming queue, reducing manual error escalations by 30%
 - Re-evaluated alarms while migrating to use AWS CloudWatch to ensure that new issues are identified before users file a report
- Hosted bi-monthly organization-wide learning series to educate on emerging technologies and development topics
 - Hosted comparative lectures on internal versus external discussions in technology and architecture patterns
 - Presented on architectural trends including Nanoservice, Containerization, and Infrastructure-as-Code before practices were widely adopted
 - Presented team-level mechanisms used to ensure continual monitoring and resolution of re-occurring issues
 - Presented lessons regarding best practices and operational excellence in technology stack and development practices
- Mentored projects and employees through initial stages of service design, project planning, and plan of record
 - Mentored twelve different project designs for new services, replacing legacy architecture. Developed delivery plan with project single-threaded owners
 - On-boarded and provided continued mentoring for eight new hires and three interns within the development team, converting two interns to full-time
 - Created a standardized on-boarding packet for new team members to introduce company standards, team charter, goals, and technologies
- Collaborated with managers and leaders within the department to establish goals, mechanisms, and techniques for increased productivity
 - Participated in a monthly managerial operational excellence review to determine industry standard practices across teams
 - Demonstrated the ability to earn trust by collaborating with leaders to establish favorable practices for delivery, escalation, and communication
 - Communicated with users, technical teams, and senior leadership to collect requirements, describe software product features, technical designs, and product strategy, ensuring alignment and successful project delivery
 - Advised on yearly plans, submitting and reviewing technology innovations to be prioritized in each fiscal year
 - Created, scoped, and prioritized eight operational projects across a multi-year plan with operational users and leadership
 - Gathered team feedback in a monthly meeting to review employee satisfaction and opinions, reporting anonymous results to management
- Managed the redesign and re-architecture of Operations Portals, improving customer satisfaction scores by 25% and reducing load times by 60%
- Managed product launches in each of the available reverse logistic regions
- Participated in interviewing and hiring new candidates to the Amazon Software Development Team
- Created a Code Review Commit Message Analyzer with 150K monthly invocations across the company
- Collaborated in expanding a Points Poker application in response to work from home mandates to allow inclusive collaboration

Software Developer

URBN Inc

2015-08 / 2019-01

Conducted work across numerous business and technology spaces to deliver products and services for e-commerce and merchandising teams

- Designed and managed the implementation of a promotional engine for the pricing service, handling 26 million monthly visitors
 - Demonstrated ownership and delivered results by managing the project from conception to production
 - Guided the implementation of a factory-based promotions engine launched to production; collectively handling approximately 26 million monthly visitors
 - Worked with a team of five developers, business executives, legal team, and marketing team to define promotional engine requirements
 - Prioritized and managed distribution of development resources to ensure timely project completion
 - Collaborated with sibling teams within the organization to ensure software contract definitions, and adherence throughout development
- Directed a team in building and launching a new brand website, maintaining 4 million monthly visitors post-launch
 - Showcased customer obsession and invent and simplify by ensuring the brand image was maintained, and the site was innovative
 - Used functional JavaScript techniques to build interactive e-commerce websites that ran on existing API services
 - Collaborated with project owners to ensure that the brand image is consistently maintained throughout the e-commerce platform
 - Hosted bi-monthly sync with the testing team to ensure that user testing procedures are up-to-date, including new website functionality
 - Successfully launched website globally at the beginning of April 2015, and stayed with team for maintenance until month's end
- Worked with a team of developers, delivering a product management system used across multiple brands; handling over 1 million products annually
 - Demonstrated dive deep by ensuring thorough understanding and integration of the system across entire catalog architecture
 - Worked with Oracle/Django/jQuery to build an interactive system to manage products for microservices architecture
 - Coordinated with e-commerce merchandisers to develop requirements and understand use cases with market brands, tailoring solutions to user base
 - Successfully launched a new web product merchandising system to internal clients in August 2016, stayed with team for continued feature improvement
- Worked with multiple teams to oversee the weekly deployment cycle and ensure compatibility between all existing and new microservice operations
 - Showed an insistence on the highest standards by maintaining high quality in deployments; reviewed all deployments before customer facing launches
 - Managed cross-service features being released by ensuring all contract changes are properly honored, collaborating across eight service teams
 - Evaluated pull-request data across services since the last release to ensure that changes remained consistent with story descriptions
 - Cherry-picked release-ready commits into a new release branch, to ensure that all release items passed user acceptance testing
- Worked with the QA team to integrate a new QA UI Test developer into the development team and create a UI Test Suite for continuous deployment
 - Integrated a UI Test Suite, automating nightly builds and training testers, increasing automated test coverage to 85% .
 - Created a custom UI Test Suite based on industry standard technologies to allow non-developer testers to create Gherkin format integration tests
 - Created a docker-based test environment deployment, testing multiple service version interactions for backwards compatibility
 - Moved UI integration tests into a nightly build cycle, to ensure identification of failures as early in the process as achievable
 - Trained a team of three QA testers on new UI integration test suite, ensured low-code environments concentrated on validating business requirements
- Migrated legacy data from third-party systems to in-house solutions using Python scripts, reducing data processing times by 40% . Exhibited bias for action by efficiently managing data migrations
 - Used a combination of event bus population and database-level migration to ensure that no real-time or historical data was lost during migration
 - Helped deprecate expensive third-party (Oracle) software previously being utilized for e-commerce management
 - Mentored third-party contractors, hired for legacy systems, through the transition to in-house technology developers
- Collaborated with cross-functional teams, including business users and operations teams, to ensure comprehensive project understanding and alignment
- Mentored six junior developers and interns, guiding them through project development and helping them to achieve their career goals, thereby enhancing team capabilities

Service Software Technology Lead

Philadelphia Game Lab

2014-01 / 2015-08

Designed and implemented a scalable Backend-as-a-Service infrastructure while managing developers across numerous teams.

- Managed a team of eight programmers and a graphic artist through multiple primary projects, including Android, Web, and Real-Time Gaming applications
 - Demonstrated ownership and delivery of results by successfully leading five customer projects to completion
 - Managed team for Android application contracted for an ADA learning community, working with Speech therapists to develop requirements and testing
 - Designed the back-end and managed a team for the web application used in a university seminar; collaborated with MBA professors to define application functionality and user experience
 - Designed and oversaw the creation of three real-time gaming applications utilizing emerging WebSocket technologies
- Worked as team lead for Backend-as-a-Service project designed to support applications created at start-up companies
 - Illustrated invent and simplify by creating scalable and streamlined backend solutions, introducing an AWS Backend-as-a-Service to reduce time to market
 - Developed HTTP scripts in C++, and PHP, and programs in Python, and Node.js to create a holistic service architecture for Backend data management
 - Worked to deploy and develop on AWS EC2 Linux and S3 instances, included automated service scaling based on traffic demands
 - Completed numerous installations of C++, Node.js, PHP, Apache httpd, MongoDB and other software on AWS EC2 instances
- Managed personnel and project resource allocation for the server-side technology department
 - Collaborated internal stakeholders, and external clients, to pitch software plans, demonstrating strong cross-functional collaboration skills
 - Demonstrated think big by envisioning and communicating bold solutions to reduce client time to market
 - Worked with the CEO to manage the day-to-day operations of the company and personnel management; including hiring 20 new employees
 - Directly managed four project leads as they planned, developed, and launched applications directly to customers
- Directly managed nine employees, helping them to grow professionally and contribute effectively to project goals, thereby enhancing overall team performance

Co-Founder / Head of Software Development

MyOhMy Design and Build

2010-03 / 2014-01

Co-founded a company to fill a market gap in apartment rental visualization, using proprietary tools and technology to expand efficiently to a three person staff

- Acquired 50+ clients nationwide, specializing in off-campus student housing across 15 states, generating \$500,000 in annual revenue
 - Demonstrated customer obsession and delivered results by securing and maintaining client relationships
 - Outbid multiple outsourced companies providing similar services to secure repeat business while maintaining low overhead costs
 - Collaborated with property managers and on-site personnel, ensuring model accuracy and demonstrating strong cross-functional skills
- Innovated the 3D modeling process using CAD software for apartment rental visualization, resulting in a sustained national commercial endeavor
 - Served to invent and simplify by developing cost-effective modeling processes, reducing delivery time from an initial 2 months down to three days
 - Rendered 3D models in advanced modeling software (V-Ray) using scripting tools to create photo-realistic images for marketing purposes
 - Developed numerous proprietary software packages to be used in modeling processes, including model mapping technologies in Ruby, C++, and Java
 - Used rudimentary computer vision to perform pixel-level analysis of 2D representations for 3D model expansion, reducing project completion times 50%
- Expanded processes to meet market needs and developed a staff to meet demand as business expanded
 - Hired in personnel to travel to on-site locations for enhanced visualization in marketing materials
 - Managed personnel and resource allocation, expanding the process to meet market demands, resulting in a 30% increase in project capacity
 - Demonstrated Ownership by effectively managing resources and personnel
 - Mentored three staff members, facilitating them to enhance their skills and contribute effectively to the company's growth, thereby fostering a culture of continuous improvement
 - Recruited additional 3D modeling specialists into the company to keep up with expanding market needs
- Migrated an ASP.NET MVC website from Rackspace to AWS EC2 for a non-profit organization, reducing hosting costs by 40% . Portrayed Bias for Action by efficiently managing the migration process

Global Customer Operations Developer

SAP America

2013-04 / 2013-09

Designed and launched a cross-platform mobile theme and coordinated with departments for internal page development

- Trained business users in HTML for intranet editing, reducing content update times by 60%
 - Demonstrated Learn and Be Curious by educating users on new technologies
 - Worked with a design team to build a cross-platform mobile theme in CSS and JS that was deployed to internal teams (SAPUI5)
- Collaborated with multiple departments to gather requirements and develop internal pages, reducing development cycle times by 30% , showcasing strong cross-functional collaboration
 - Coordinated with numerous departments to gather requirements and develop internal department pages (SAP Portal)
 - Established and updated department-specific pages on the SAP internal social network (SAP JAM) after gathering requirements from the VP level
 - Trained business users in the use of HTML for the basic purpose of intranet editing to ensure continued maintenance of system content

Internet Services Developer

National Board of Medical Examiners

2012-04 / 2012-09

Maintained external and internal applications, integrated an updated intranet, and modernized CSS and JS

- Maintained multiple external and internal applications with 50,000 unique external customers per year
- Integrated updated intranet with existing version to ensure compatibility with Microsoft SharePoint
- Designed and organized layout of new and existing web pages built on ASP.NET VB and Microsoft SharePoint
- Worked to modernize CSS and JS on existing applications to use CSS3 and HTML5 APIs

Web Technologies Associate

Campus Apartments

2010-09 / 2012-04

Converted a proprietary Rental Management System from ASP.net 1.1 to 4.0, updated SQL Server, and introduced semi-agile workflows

- Converted database-centric proprietary Rental Management System and Tenant Portal from ASP.net 1.1 to 4.0 utilizing code behind in VB and C++
- Simultaneously updated database from SQL Server 2000 to SQL Server 2008 and standardized table and stored procedure naming conventions
- Photographed buildings and edited images in Photoshop to attract renters' interest
- Helped introduce semi-agile work flow with a focus on pair-programming using VisualSVN for Visual Studio

Education

Bachelor of Science in Computer Engineering

Philadelphia PA

Drexel University

2010-09-20 / 2015-06-15

- Major in Computer Engineering
- Minor in Electrical Engineering
- Minor in Business Administration