John R. Ailor

Software Development Manager

Seattle, Washington   📞 1-484-354-9199   @ ailor.john.r@gmail.com   🔗 alpha59.github.io   in John R. Ailor   ○ alpha59

Experience

Software Development Engineer II

Amazon Inc   2019-01 / Present

- Redesigned, and Rearchitected all core services into a configurable orchestration service to replace hard-coded workflow system
  - Managed project work including resource management across seven team members, ensuring deadlines were met
  - Re-used existing services where possible, modified to run on server-less architecture 65% response time reduction
  - Worked with four dedicated business partners to collect appropriate requirements and ensure that all use cases were covered
  - Worked with operational partners to re-design outbound transportation routing rule engine
  - Launched a new region to accommodate the release of major new product initiatives, and expected increase in returns
  - Oversaw deprecation of six legacy systems, including developing data migration and backup plans
  - Used Monte-Carlo simulations to determine project milestones and launch dates, based on previous project velocities
- Designed and managed a multi-team initiative, reducing the number of service teams involved in reverse logistics by a third
  - Integrated Online Device returns with third party Retailer Device Returns, condensing the number of operational lines in the return center by 30%
  - Expanded services to include management of third party devices in the same reverse logistics space, increasing the number of operations possible for non-Amazon device returns
  - Worked closely with Finance and Accounting teams to ensure compliance was maintained throughout the project release, with no value loss during launch
- Pushed Team's Operational Excellence forward with new upgraded technology stack proposals
  - Moved technology stack to a cloud architecture with an 85% reduction in on-site servers
  - Migrated existing service stack to server-less technology to ensure scalability across all regions
  - Migrated existing service stack to infrastructure as code, reducing the technology burden of adding a new region from two months down to three days
- Re-imagined teams agile process to include procedures and mechanisms to guarantee success; reduced sprint rollover by 75%
  - Implemented new story and ticket procedures that focused on quality and traceability, including a rubric and templates
  - Reviewed and provided feedback on every story and ticket before introducing to the sprint, insisting on the highest standards
  - Developed new formula for sprint capacity estimation, utilizing a moving average of goals met versus capacity estimated
- Introduced new tenants and goals for testing procedures to ensure tests were targeting and finding critical bugs within the existing architecture
  - Re-designed and rebuilt functional tests to span across multiple services and focus on customer stories from the business requirements documents
  - Implemented integration tests to ensure dependent services were performing as expected
  - Moved all testing into both automatic pipeline deployments, and automated change request tool to remove manual steps from the deployment process
  - Automated bug ticket monitoring system to organize incoming queue
  - Re-evaluated alarms using AWS CloudWatch to ensure that new issues were identified before users filed a report
- Hosted bi-monthly organization wide learning series to educate on various emerging technologies and development topics
  - Held comparative lectures on internal versus external discussions in both technology and architecture patterns
  - Presented on architectural trends including Nanoservice and Infrastructure as Code
  - Taught lessons in regards to best practices and operational excellence in both technology stack and development practices
- Mentored both projects and employees through initial stages of service design
  - Mentored twelve different project designs for a variety of new services introduced to the overall architecture
  - On-boarded and provided continued mentoring for two new hires and two interns within development team
  - Created standardized on-boarding packet for new team members to introduce both company standards and team technologies
- Collaborated with managers and leaders within department to establish goals, mechanisms, and techniques for increased productivity
  - Participated in monthly managerial operational excellence review to determine best practices across multiple teams
  - Ran bi-weekly sprint retros to gather feedback regarding team productivity, including creation of future action-items
  - Participated in security audits for various existing and new services and systems
  - Advised on yearly planning, submitting and reviewing technology innovations to be prioritized in each fiscal year
  - Created organizational CDK Constructs for easier infrastructure as code deployments for common architectural patterns
- 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 Points Poker application in response to Work From Home mandates to allow inclusive collaboration among team members in planning activities

Software Developer

URBN Inc   2015-08 / 2019-01

- Designed and managed the implementation of promotional engine for pricing service
  - Guided the implementation of a Factory based promotions engine launched to production; collectively handling approximately 26 million monthly visitors
  - Worked with team for five developers to build and launch promotional engine, managing project from idea to production
  - Prioritized and managed distribution of development resources to ensure timely project completion
  - Collaborated with sibling teams within organization to ensure that software contract terms were defined and adhered to throughout development
- Worked with a team of four developers to build and launch a new brand website; which handled 4 million monthly visitors after initial launch
  - Utilized functional JavaScript techniques to build interactive e-commerce website build on existing API services
  - Collaborated with project owners to ensure that brand image was maintained throughout e-commerce platform
  - Hosted bi-monthly sync with testing team to ensure that user testing procedures were updated to include new website functionality
  - Successfully launched website globally at beginning of April 2015, and stayed with team for maintenance till month's end
- Worked with a team of developers to build a product management system to be used with multiple brands; collectively handling about 26 million monthly visitors
  - Worked with Oracle/Django/jQuery to build an interactive system to manage products for micro-services architecture
  - Coordinated with e-commerce merchandisers to develop requirements and understand use cases
  - Successfully launched new product management system to internal clients in August 2015, stayed with team for maintenance and feature improvement
- Worked with multiple teams to oversee weekly deployment cycle and ensure compatibility between all existing and new micro-service operations
  - Managed cross-service features being released by ensuring all contract changes were properly honored.
  - Evaluated pull-request data across services since the last release to ensure that changes were consistent with story descriptions
  - Cherry-picked release ready commits into a new release branch, for owned services to ensure that all released items had passed user acceptance testing
- Worked with QA team to integrate a new QA UI Test developer into development team and create a UI Test Suite
  - Created 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
  - Moved UI Integration tests into a nightly build cycle, to ensure that failures were identified as early in the process as possible
  - Trained a small team of testers to develop new UI tests using integration test suite
- Helped to migrate legacy data from third party system to in-house solution using data migration scripts written in Python
  - Utilized 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 costly third party software previously being utilized for e-commerce management
  - Mentored third party contractors who were hired for legacy systems through the transition to in-house technology developers

Lead Service Software Developer

Philadelphia Game Lab   2014-01 / 2015-08

- Managed a team of eight programmers and a graphic artist through multiple primary projects
  - Managed team for Android application contracted for a learning community
  - Designed back-end and managed team for web application used in a university seminar
  - 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 small companies
  - Developed HTTP scripts in C++, and PHP, as well as programs in C++, Python, and Node.js
  - Worked to deploy and develop on AWS EC2 Linux and S3 instances
  - Completed numerous installs of C++, Node.js, PHP, Apache httpd, MongoDB and other software on AWS EC2 instances
- Managed personnel and project resource allocation for server-side technology department
  - Pitched software architectures successfully to clients, investors, and technology partners
  - Worked with CEO to manage day-to-day of company and personnel management; including hiring 20 new employees
  - Directly managed four project leads as they planned, developed, and launched applications directly to customers

Co-Founder / Head of Software Development

MyOhMy Design and Build   2014-01 / 2015-08

- Acquired 50+ nation wide clients specializing in off-campus student housing in 15 states
  - Out bid multiple outsourced companies providing similar services in order to secure repeat business
  - Collaborated with property managers/owners and on-site personnel to ensure model accuracy
- Innovated 3D modeling process, using CAD software, resulting in a sustained national commercial endeavor
  - 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
  - Utilized rudimentary computer vision to perform pixel level analysis of 2D model representations for 3D model expansion
- Expanded process 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
  - Brought additional 3D modeling specialists into company to keep up with expanding market needs
- Migrated a ASP.NET MVC website from Rackspace hosting server to an AWS EC2 instance for non-profit organization

Global Customer Operations Co-Op

SAP America   2013-04 / 2013-09

- Worked with a design team to build a cross platform mobile theme in CSS and JS which was deployed to internal teams (SAPUI5)
- Coordinated with numerous departments to gather requirements and develop internal department pages (SAP Portal)
- Built and updated department specific pages on the SAP internal social network (SAP JAM) after gathering requirements from VP level
- Trained business users in the use of HTML for the basic purpose of intranet editing in order to ensure continued maintenance of system content

Internet Services Co-Op

National Board of Medical Examiners   2012-04 / 2012-09

- Maintained multiple external and internal applications
- Integrated updated intranet with existing version in order 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

Web Technologies Associate

Campus Apartments   2010-09 / 2012-04

- Converted database centric proprietary Rental Management System and Tenant portal from ASP.net 1.1 to 4.0 utilizing code behind and Master Pages 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 in order to further renters'interest
- Helped introduce semi-agile work-flow with 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