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

Amazon Inc   2019-01 /

- Rebuilt internal portals into React from outdated Front-end technology stack, replacing the angular stack with a revised React Framework
- Re-used existing back-end services, modified to include new search and pagination functionality optimized for SQL
- Managed project work including resource management across team members to ensure deadlines and milestones were met
- Worked with multiple business partners to collect requirements and ensure that all requirements were fulfilled
- Designed and managed a cross team collaboration for a new reverse logistics processes that spread across multiple existing domains
- Online Integrated Device returns with third party Retailer Device Returns, condensing the number of operational lines in the return center by 30 percent
- Expanded software to include third party devices in the same reverse logistics space, improving non-Amazon device returns
- Worked with operational partners to re-design outbound transportation routing rule engine
- Oversaw on the release of new product initiatives for internal products reverse logistics
- Managed product launches in each of the available reverse logistic regions
- Launched a new region to accommodate the release of major new product initiatives, and expected increase in returns
- Pushed Team's Operational Excellence forward with new upgraded technology stack proposals
  - Moved technology stack to a cloud architecture with no more on-site servers
  - Migrated entire stack to server-less technology to ensure scalability across all regions
  - Migrated entire 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 new procedures to help guarantee success
- Implemented new story and ticket procedures that focused on quality and traceability, including a grading rubric and new templates
- Reviewed and provided feedback on every story and ticket before they could be introduced to the sprint, insisting on the highest standards
- Developed new formula for sprint capacity estimation, which combined with other changes reduced sprint rollover by 75 percent
- Ran bi-weekly sprint retros to gather feedback and plan improvements to team productivity
- 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 to automatic pipeline deployments to remove any manual steps from the deployment process
- Re-evaluated and added alarms using AWS CloudWatch to ensure that new issues were identified before users needed to report them
- Hosted bi-monthly organization wide learning series to educate on various emerging technologies and development topics
- Created several organization wide CDK Constructs for easier infrastructure as code deployments for common architectural patterns
- Mentored eight different project designs for a variety of new services introduced to the overall architecture
- Automated bug ticket monitoring system to organize incoming queue
- Participated in security audits for various existing and new services and systems
- Participated in interviewing and hiring new candidates to the Amazon Software Development Team
- Oversaw deprecation of numerous legacy systems, including developing data migration and backup plans
- Mentored new hires and created a standardized on-boarding packet for new team members
- Created a Points Poker application in response to Work From Home mandates to allow inclusive collaboration among team members in planning activities
- Participated in monthly managerial operational excellence review to determine best practices and improvements across multiple teams
- Participated in yearly Operational planning, including submitting and reviewing technology innovations to be prioritized in the upcoming fiscal year
- Used Monte-Carlo simulations to determine estimated project milestone and launch dates, based on previous projects undertaken by the team

Software Developer

URBN Inc
2015-08 / 2019-01

- Designed discount and promotional engine for pricing service
- Guided implementation of Factory based Promotions engine launched to production; collectively handles about 26 million monthly visitors.
- Worked with small team to build and launch a new brand website; now handles about 4 million monthly visitors
- Utilized Node.js and Hapi.js web-framework to interactive with API services
- Harnessed the power of ES6 and functional programming (Ramda.js) to develop rich user interfaces
- Developed using stream based events (most.js) to handle event based programming paradigms
- Used LESS based CSS pre-compilation to style and format client facing website
- 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
- Converted all ES5 code to ES6 and updated HTML templates for re-use-ability
- Used Python services to migrate legacy product data to new system
- Used SASS based CSS pre-compilation to style and format internally facing website
- Successfully launched new product management system to internal clients in August 2015, stayed with team for maintenance and feature improvement
- Re-imagined and rebuilt the e-commerce promotion and coupon management suite
- Coordinated with e-commerce merchandisers to develop requirements
- Designed import and export algorithms for various message consumers
- Prioritized and managed distribution of development resources to ensure timely project completion
- 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 all 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 Selenium and webdriver.io to allow non-developer testers to create Gherkin format integration tests
- Created a docker based test environment deployment to all testing multiple service version interactions
- Moved UI Integration tests into a nightly Jenkins build, 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.

Lead Service Software Developer

Philadelphia Game Lab
2014-01 / 2015-08

- Worked to deploy and develop on AWS EC2 Linux and S3 instances
- Completed numerous installs of C++, Node.js, PHP, Apache httpd, Mongo and other software on AWS EC2 instances
- Developed HTTP scripts in C++, and PHP, as well as programs in C++, Python, and Node.js
- Enabled real-time requests for gaming and live applications in Node.js utilizing websocket technologies
- Managed a team of eight programmers and a graphic artist through several projects
- Pitched software architectures successfully to clients, investors, and technology partners
- Worked with CEO to manage day to day operations of company and personnel management; including hiring 20 new employees
- Oversaw design and execution of several client and in-house projects
- Worked with Unity, Unreal, and Oculus Rift for a temporary interactive installation

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)
- Worked to build and update department specific pages on the SAP internal social network (SAP JAM)
- 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

Co-Founder / Head of Software Development

MyOhMy Design and Build   2014-01 / 2015-08

- Innovated 3D modeling process, using CAD software, resulting in a sustained national commercial endeavor
- 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
- Rendered 3D Models in advanced modeling software (V-Ray) using scripting tools to create photo-realistic images for marketing purposes
- Collaborated with property managers/owners and on-site personnel to ensure model accuracy
- Expanded process to meet market needs and developed a staff to meet demand as business expanded
- Developed numerous proprietary software packages to be used in modeling processes, including model mapping technologies in Ruby, C++, and Java
- Migrated a ASP.NET MVC website from Rackspace hosting server to an AWS EC2 instance for non-profit organization

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