Ryan Billings

Arlington, VA | ryj.billings@gmail.com

Technology professional with 10+ years of industry experience as a software engineer, manager, and educator.

Education

CARNEGIE MELLON UNIVERSITY
B.S. in Information Systems
Minor in Computer Science
Sept. 2009 - May 2013
Graduated with Honors

GEORGE MASON UNIVERSITY
M.S. in Information Systems
Department of Computer Science
Sept 2016 - December 2019
Graduated with 3.97 GPA

Technology

- Ruby, Rails, Java, Node.js
- Javascript, React, Redux, jQuery
- SQL, MySQL, PostgreSQL
- AWS/Serverless
- GraphQL, REST
- HTML, CSS, SCSS
- Git
- Linux/Unix/Bash
- Jira

Process

- Agile, Scrum
- Continuous integration
- Test-driven development
- Code reviews
- Project management, SDLC
- Object-oriented design
- Domain modeling, ERD

Professional Experience

Assistant Professor   January 2023 - Present
Northern Virginia Community College   Alexandria, VA

Working for the Information and Engineering Technology Department at NOVA, where I teach students concepts such as: designing software, web design, Linux, and programming.

- Create course content including: a syllabus, assignments, lectures, in class exercises, quizzes, and exams to meet objectives specified in the Course Catalog.
- Engage and motivate students by using active learning techniques such as in class competitions, word cloud generators, and other group activities.
- Hold weekly office hours, providing 1:1 help to students, and grade assessments.

Software Development Engineer   March 2021 - April 2023
Amazon.com   Arlington, VA

Worked on the Prime Video Sports team, which is responsible for broadcasting live sports, such as Thursday Night Football, to millions of customers on Prime Video.

- Created the methodology and tools to measure the performance and availability of Prime Video sports, allowing stakeholders to measure the health of the business.
- Created end-to-end software to enable an internal organization to manage Amazon's broadcasting rights using GraphQL, React, and Typescript.

Software Development Engineer   Jan. 2020 - March 2021
Amazon Web Services   Arlington, VA

Worked on a core team within the AWS Region Services organization to facilitate the programmatic access and discovery of AWS infrastructure and service information.

- Developed client libraries used by over 70% of internal Amazon software
- Created end-to-end customer experiences to assist in managing service information within AWS regions

Software Engineering Manager   Nov. 2017 - Aug. 2019
Custom Ink   Fairfax, VA

Led a team of 6 engineers in architecting, developing and launching core features for the Design Lab—Custom Ink's main tool for customers to design t-shirts.

- Led the team in launching a new React/Redux based Design Lab.
    Resulted in $20mm in increased annual revenue.

- Deployed aesthetic and performance enhancements to the new Design Lab using React, Redux, Rails, and AWS.
  - Resulted in an additional 10% increase in annual revenue.
- Regularly contributed to the codebase by opening and reviewing pull requests, and encouraged a collaborative code review culture with engineers on the team.
- Wrote automated tests using Mocha and Enzyme, and configured them to run on TravisCI to ensure robust code releases.
- Led the team using Agile best-practices, including running daily stand-ups, sprint planning, backlog grooming, retrospectives and demos.
- Developed engineers through bi-weekly 1:1s, quarterly goals, annual reviews, and team bonding activities.
  - Resulted in increased employee engagement and retention, as measured through company surveys.
- Collaborated with stakeholders, product managers, designers, including quarterly meetings with the CEO and senior leaders.
- Regularly interviewed and hired engineers for the Engineering Department.

Technical Team Lead   Nov. 2016 - Nov. 2017
Custom Ink   Fairfax, VA

Architected and launched two major projects to improve the customer experience and website security as both a technical and project lead.
- Led, tasked and contributed to a team of 3 engineers using Node.js (Express), React and AWS (Lambda, Beanstalk, SQS, S3) to create a new image processing system that allows customers to upload and manipulate their own artwork.
  - Resulted in 2x faster transactions and reduced server load.
- Led a 6-month cross-department project to overhaul CustomInk.com to meet the highest standards of Payment Card Industry (PCI) compliance.
- Instrumented and analyzed application metrics using NewRelic, Cloudwatch, and Google Analytics.

Software Engineer   July 2013 - Nov. 2016
Custom Ink   Fairfax, VA

Developed key customer-facing features for the Design Lab and shopping cart.
- Lead Javascript and Rails contributor on a project to allow customers to get a quote while designing their product, and added automated test coverage with Mocha, Minitest, and Jenkins.
  - Resulted in at least $2mm increase in annual revenue.
- Lead contributor on a project that expanded the product types that customers could design on, using Agile practices to go from a prototype to MVP.
- Led Custom Ink's technical integration with Pearup, a start-up that enabled customers to add corporate sponsorships to their products for the first time.
- Designed database models, built RESTful web services, publish APIs, perform database migrations with MySQL, and implement backend systems using Ruby on Rails to support new additions to the website.

Independent Consultant   Dec. 2015 - May 2018
OSIBeyond   Bethesda, MD
- Worked directly with the CEO and built a new customer-facing website for OSIBeyond.
- Used Javascript to build a single page application with a Rails backend.
- Improved website search rankings by implementing SEO best practices.

Software Engineering Intern   May - August 2012
Next Jump   Cambridge, MA

Software Engineering Intern   May - Aug. 2011
Akamai Technologies   Cambridge, MA

Information Technology Intern   May - Aug. 2010
Staples Inc.   Westborough, MA