

ARNAB DEKA

SOFTWARE DEVELOPMENT ENGINEER

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arnab.deka@gmail.com

(206) - 617-7605

arnab-deka.com

Summary

Six years of delivering quality software in diverse environments like Amazon.com, AWS and Goldman Sachs. Extensive experience in Ruby, including four years of Rails.

Skills

Versatile Engineer

Extensive experience and balanced skills in user-interfaces, web services and distributed computing in fast and intense environments. Strive to understand the needs behind customer's requests and explore alternatives.

Focus on Quality

Focus on code quality and intuitive about potential usability/operational issues. Embrace and evangelize BDD/TDD while building software to solve business needs.

Leadership & Collaboration

Self-starter with a passion to adapt and evangelize new technologies. Track record of successfully executing both team and individual projects. Love to collaborate and have an aptitude for mentoring.

Technical

Ruby	HTML / HTML5	AWS
Ruby on Rails	CSS	Git / CVS / Perforce
Java	Javascript / CoffeeScript	Linux / Unix
MySQL / Oracle / Sybase	jQuery	Mac OS X

Experience

Amazon Web Services (AWS) Software Development Engineer

2010-present

Built a Ruby/Rails platform for the AWS website and started re-architecting components of the site to use this platform. Influenced the team to use Ruby where appropriate and helped recruiting a great team of engineers.

- Lead the design and development of AWS website's contextual and faceted [search](#) component. Combined disjoint datasets in a generic way making new dataset additions easy. Widely appreciated by customers of all sizes and within AWS and got featured in the [AWS blog](#).
- Re-architected the community-oriented components of the AWS website to make them much more customer friendly and usable. Developed a generic catalog framework that is re-usable across multiple areas ([EC2 AMIs](#), [Developer Tools](#), [Sample Code](#) etc.) and started the process of moving the catalogs to the new framework. Drove graphic design and UX discussions with design-teams. Experimented with pair programming and was perceived to be fast and very productive by the team. Code and test's quality was eye-opening for the team.

Amazon.com

Software Development Engineer - Supply Chain

2008-2010

Started my career in Amazon as an SDE I and got promoted within a year. Helped solve complex business problems in supply chain by working with analysts, building software solutions and a varied

mix of tools to make sense of the massive amount of data.

- Built a prototype to generate the Amazon.com S&OP forecast with a linear-programming model. Drove adoption by demonstrating that it produced better or in-line results compared to the manual S&OP (which takes 80 hrs/week of analysts).
- Drove adoption of automated-testing and BDD with tools like rspec/cucumber, while being the junior-most engineer. Evangelized other software engineering tools like git, jQuery etc.
- Developed a tool to analyze the amount of wasteful cross-dock happening in Amazon.com fulfillment centers. Designed it applying a binary-search technique to avoid inefficiencies in an API that made the tool 65% faster with no loss of accuracy.
- Developed a RESTful service to get Amazon.com fulfillment network's product-allocation configuration, previously a 2000+ line yaml maintained by SDEs. Also developed a webapp for analysts to make self-service, on-demand configuration changes. Reduced 4 hours/week of SDE operational work.
- Lead the development of a critical reporting webapp that showed alarming trends in terms of labor requirements in Amazon warehouses to cope with the US holiday-season demand.
- Wrote a tool to mine various Amazon data sources to find alternate inventory we could use to fulfill those last-minute "Santa orders". Coped with a very tight deadline and a lot of ambiguity.
- Wrote my first Rails app, in 2008, to hook into a backend system (that prioritizes/schedules inbound trucks into Amazon warehouses) to allow rare but critical manual overrides to the system's scheduling decisions. Estimated to save 120 hours of analyst and SDE time in Q4'2008.
- Wrote an in-house analytics tool to parse apache access logs to help us know more about our customers.

Infosys Programmer Analyst

2004-2007

Started off as a junior programmer in the Goldman Sachs account (in Bangalore and NYC) and went on to build software that caught the customer's eye, leading to major development efforts collaborating with client-side engineers.

- Designed and implemented a system (backend services, batch-processes, webapp) to handle a new SEC regulation for Short Sales. Acknowledged as a flexible and elegant solution to a challenging problem (complicated regulatory rules, real-time interaction with outside systems over EMS messaging). Learnt automated-testing during the project, finished with 93% coverage.
- Re-architected the Canadian and Lat-Am Clearance system with a team of 8 diverse engineers. Lead the overnight batch part of the project. Learnt and practised agile development style.
- Designed and implemented the CNS (DTC) Bulk Settlements component.
- Automated the NSCC Recap process at Goldman - freeing up a day per month of analysts.
- Wrote a tool to diff the team's live DB schema/triggers/stored-procs with source-code definitions. This helped the team avoid occasional, but critical accidents in production, much appreciated by the client.
- Kept Goldman's American Clearance systems running with a team distributed over 3 continents (support/maintenance/enhancements).

Education

National Institute of Technology, Calicut, India
B. Tech., Civil Engineering — **6th** in a **class of 59**

2001-2004