

# ARNAB DEKA

SOFTWARE DEVELOPMENT ENGINEER

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[arnab.deka@gmail.com](mailto:arnab.deka@gmail.com)

(206) - 617-7605

[arnab-deka.com](http://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.

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## Infosys

2004-2007

### Programmer Analyst

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).

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## Education

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

2001-2004