MOHAMMAD ARAFATH

SOFTWARE DEVELOPMENT ENGINEER

Github
LinkedIn
we.mohammad@gmail.com
+91 7337735439
Medium

Profile

Four years of delivering quality software in diverse roles like backend and devops. Solving complex business problems at scale. Extensive experience in E-commerce, Large Scale Crawling and CloudOps.

Technical

Java	AWS	Linux
Python	Git	Bash / Shell Script
MySQL / PostgreSQL	HTML / CSS	jQuery / Angular

Experience

Boomerang Commerce (Bangalore)
Software Engineer   Jul 2014 - present

Worked on solving complex business problems on large scale and managed cloud operations for >85% of Boomerang Commerce

- **Large Scale Crawling** (Java, AWS)
  Built an innovative multi-cloud Resource Manager to acheive 10X crawling throughput, address blocking at less than 2X the current cost. It enables resource sharing, throttling, and load-balancing for short-running I/O jobs. Able to handle 600 QPS and distribute the load over 2500 instances. Designed end-to-end architecture and defined product life-cycle.

- **Real-Time Crawling** (Java, AWS)
  Built from the ground up, a rapid crawl pipeline for one of the top e-commerce players in the US to handle >3 million crawls a day. This unlocked intraday pricing termed as a "Huge Milestone" for Boomerang. Worked against an aggressive deadline and ambiguity. Designed end to end architecture and delivered critical part of the system.

- **AWS Fleet Management Suite** (Python, Bash, AWS)
  Managed 2500 AWS instances to address 15 million crawling requests a day, designed fleet management suite ground up. Came up with an innovative multi-alarm-integration feature for demand-based scaling and code bundled instances. Reduced fleet management costs by 50%. Brought down instance cold-boot time 10x from 9 minutes to 52 seconds.

- **Markdown Optimisation** (Java, R, AWS)
  Built a horizontally scalable R-Engine for Boomerang's Markdown product. Designed end to end architecture and built from the ground up. This reduced runtime by 50% time and built monitoring that system made the process transparent.

- **Price Intelligence Suite, Boombar** (Java, AngularJS)
  Built Price Intelligence Dashboard, one stop shop for all price performance and perception metrics. Built Boombar a nifty Chrome extension that our clients would use to compare competitor prices on client's product page itself. Described as "intuitive and insightful" by the CEO. Clients loved the product increasing the account conversion and exceed Q1 milestone. Boombar has 650 WAUs across all clients, this is the most used product in Boomerang.

- **Product Match Review Dashboard** (Java, AngularJS)
  Replaced existing manual lookup process for checking product match rates, by driving adoption to Review Dashboard which helped the team to up the speed 3X and brought down manual touch points in the whole process down to zero.

- **Pricing Rules Builder** (AngularJS)
  Decreased consumer friction by making Boomerang Pricing Rules Builder more intuitive and responsive, thus driving more adoption and making onboarding any new client effortless.

Achievements

- My Random-Forest implementation in Java on Github is used by many research scholars for their thesis. This project now has over 85+ stars and forks combined.

- Won Boomerang Hackathon'17 for building an innovative neural-network trained for product matching. Increased accuracy to 85% from 60%.

- Anglehack'15 finalist for building a plug-and-play dynamic cost-optimizer for infrastructure on AWS, leveraging non-linear spot pricing of EC2 instances. Achieved minimum 35% savings on entire instance catalog.

- Built and grew a 3D social network "Zoot" achieved 1100 WAUs, which was 92% of our College.

- Won Computer Security Project for coming up with an innovative chrome extension that would encrypt Gmail communications, ability to delete emails after sending and allowing the user to configure which encryption to use.

Skills

Versatile Engineer

Experience and balanced skills in web services and infrastructure in fast and intense environments. Emphasis on understanding customer use cases and quickly build prototypes.

Delivery Quality

Focus on code quality and intuitive about potential usability/scale/operational issues. Use "Ship Fast and Iterate" methodology in building software to solve business needs.

Leadership & Collaboration

Self-starter with a passion for adapting and evangelizing new technologies. Track record of successfully executing across multiple teams and individual projects. Love to collaborate and have an aptitude for mentoring.

Education

Indian Institute of Technology - Hyderabad
B.Tech in Computer Science with Minors in Entrepreneurship   2010-2014