Himesh Ramjee

Husband. Dad. Technologist & DIY enthusiast.

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Summary

- Bachelor's degree in Computer Science & Information Technology
- 4+ years experience leading and managing people, technology and software in high performance environment (Amazon AWS)
- 6+ years experience as a software developer (e-Commerce/retail industry, Java, C#)
- Strong verbal and written communication skills
- Excellent judgment to influence product architecture, roadmap direction, features, and priorities
- Strong problem solving and critical thinking skills
- Tactical and Strategic thinker that helps drive technology and expedite organisational goals
- Skilled leader who has the proven ability to motivate, educate, and manage a team of professionals to build software programs that delight customers and drive a business forward
- Strong skills in work prioritisation, driving architectural decisions, technical debt and dependency management and coaching/mentoring individuals
- Experience with development and management challenges of large scale distributed systems (AWS EC2)
- Experience measuring the health and effectiveness of technical systems and business processes
- Experience designing and operating large scale, distributed systems with integrations to numerous systems
- Experience leading multiple high performing engineering teams

EXPERIENCE

Amazon.com, Cape Town — Software Development Manager

4 years, October 2015 - October 2019

Joined the AWS EC2 Control Plane Platform (CPP) organisation and led various engineering teams during this period. The role included the end to end responsibilities of managing a business (combinations of C- roles). Responsible and accountable for all aspects of running a business Recruiting and Performance Management, Product ownership, Project and Operations Management. The role involved engaging and reporting to various levels of leadership as required. Managed and promoted SDEs up to the Senior SDE level. Directly managed up to 12 engineers across ~15 production systems. Largest systems were the EC2 API Web Service, Cache Service and EC2 Tags service. Key contributor in developing and communicating the CPP organisations identity, purpose and services. Provided technical support throughout project life cycles including design, implementation, and delivery of scalable software. Direct contribution to launching at least 4 major public EC2 product feature launches and supported numerous others. Actively managed the strategic direction of engineering teams and ensured that team goals were always aligned with that of the broader organisation. Provided engineers with daily coaching and mentoring in developing their goals and being more happy and effective in their deliveries.

Mr. Delivery, Cape Town — Software Development Manager

6 months, April 2015 - September 2015

Reported to the CTO. Initially responsible for both Mr Delivery Courier & Mr Delivery Food engineering teams. The Food systems had not received sufficient investment prior, they were outdated and operationally highly unstable. Worked with engineers, Technical Project Manager and the Head of Business to stabilize daily operations and put together a roadmap plan for rebuilding the stack from the ground up. Introduced basic monitoring (New Relic), which helped identify and resolve major inefficiencies in the system. Developed the

high-level architecture and migration plan that would guide the build of the new stack. It was modelled on distributed microservices architecture and a mobile first development approach along with RESTful APIs. Built python scripts to automate infrastructure provisioning in AWS. It allowed Dev, Pre-Prod & Prod to be spun up or torn down automatically. This served as a proof of concept to explore the costs of AWS, as an anchor point for learning AWS technology and an initial cost saving function in day to day development.

MIH Group - kalahari.com, Cape Town — Senior Java Engineer to Tech lead and Solutions Architect

4 years, April 2011 - March 2015

Joined the MIH group and got the opportunity to be part of a massive re-architecture programme for the largest retail website; the Amazon of South Africa. Part of the 5-member team of senior engineers that seeded the project. Thereafter moved into a tech lead role as a Solutions Architect. Led and managed the kalahari.com Buyer engineering team (~4-6 engineers). Responsible for the development and maintenance of the entire Buying experience on the website. Daily activities included designing and developing software, recruiting engineers and on-boarding new team members. Regularly worked with other teams like Marketing, Product managers, Business analysts, UX designers and Customer support. Received 2 formal promotions during this time going from Senior Developer to Tech Lead and finally to Solutions Architect.

kalahari.net, Cape Town — Intermediate C# Engineer to project lead

~3 years, January 2008 - March 2011

Moved to Cape Town to take on a 4-month engineer contract based at kalahari.net offices. Started a greenfield project and successfully led and managed 2 other engineers to help deliver it. Upon completion we moved into a broader engineering team where I regularly took on leadership tasks to help grow and coordinate work in my team. Day to day tasks involved all aspects of a Technical & Project Lead role.

3fifteen Technology Solutions, Johannesburg — Junior to Intermediate C# Engineer

~1.5 year, December 2006 - July 2008

Joined 3fifteen, a software consulting company after graduating from the Microsoft Graduate Academy. Grew my software development skills set in Microsoft technologies during this time. Transitioned into the Senior Engineer role around 2008 and led projects as an engineering consultant based at client offices.

SKILLS

Current - Technology Architecture and Management, People Management and Growth, Software Development Management.

Previous – Senior Java Engineer and Solutions Architect – C#, Java, Enterprise Architecture, Spring Framework, Hybris platform, ActiveMQ, MySQL

EDUCATION

Self Taught, Online — *Various technologies*

2020 - Present, GitHub, himesh.ramjee.co.za

This is something I am now regularly engaged in. I run some personal projects that help me explore new tech or get up to speed with emerging/newer industry standards. They are not always active as the DIY enthusiast in me also runs various home improvement projects that are not software related. Thus far I have learned about Container technologies like Docker, JavaScript frameworks like NodeJS together with Express and Pug JS. I have also dabbled with Natural Language processing and am looking to unpack TensorFlow at some point. In

2020 I migrated my personal domain and email service from a local provider to Amazon AWS. I am currently building an auto trading robot that is written in MQL5 and runs on the MetaTrader 5 Platform.

Amazon Web Services, Online — *Various certifications*

July 2020 - Present

Currently working to widen my AWS knowledge by completing online courses. I have completed the AWS Cloud Practitioner and Solutions Architect Associate courses but have yet to write the exams. I found these to be really entry level in the material they cover so have moved onto the AWS Developer Associate course which I am currently busy with. In due time, I plan to do at least 1 of the Developer or Architect Professional courses.

Microsoft Graduate Academy, Johannesburg — MCSE & MCSD Certification

January 2006 - December 2006

Following the completion of my BSc degree at university, I was selected to join the MS Graduate Academy program. During this time, I successfully completed both the Microsoft Certified Solutions Expert (MCSE) and Microsoft Certified Solutions Developer (MCSD) courses. Technically this was my first paying job.

University of Kwa-Zulu Natal, Durban — BSc Computer Science and Information Technology

January 2002 - December 2005

NOTABLE EXPERIENCES

AWS EC2 Projects - EC2 Control Plane Platform

EC2 Control Plane Platform organisation owns the stateless EC2 API Web Service. The organisation's primary goals are centered on delivering the best customer and developer experience in interacting with the APIs. This is a high performance service that acts as the main entry point for all programmatic interactions with EC2. When I first joined, I was given a portfolio of products that included the EC2 Tagging systems (meta data associated with EC2 resources), EC2 API Protection and API Dynamic Configuration systems. As reference for scale, these were systems that directly support ~250 EC2 APIs at remarkably high TPS rates. The most used API rates are in the 1000s of transactions per second.

The EC2 Tagging product is a highly complex one. It is on the critical call path for all taggable resources due to its use within IAM security policies. As of August 2020, there are ~50 taggable resources which owned across at least 18 engineering teams within EC2. These numbers make all tagging projects highly impactful, both internally to AWS and to public customers. In my first year at Amazon, I supported my team in managing the upgrade and migration of the EC2 Tagging systems data store which saw zero downtime or operational impact to customers. In the following year, I prioritized projects to improve the tagging API experience and released support for a key tagging feature ("Tag On Create"). This feature laid the groundwork for subsequently supporting Tags as a core part of AWS AuthoriZation policies for taggable resources. This is such a key feature that AWS made such support mandatory for all resources, driving all existing and new EC2 resources to integrate with EC2 Tagging. This resulted in us making additional investments in improving the developer experience in on-boarding with the service.

The EC2 API Web service is one of the large scale systems deployed to all AWS regions. Taking ownership of the APIs was the most challenging and rewarding period of my career. Every EC2 feature launch had to go through my team. I gained massive experience in leading teams through large multi-org projects. Some of the public facing projects that my teams were involved in included, launching IPv6 support in EC2, Elastic Graphics, launching numerous new EC2 Instance Types and migrating to longer resource IDs. These were successfully delivered along with ensuring minimal blockage in our CI/CD pipeline and whilst keeping the lights on with significant operations across my portfolio. At the time, the portfolio included ~11-15 internal web applications and backend systems and the EC2 API Cache Services (which was the largest EC2 fleet of hosts at the time -

The EC2 API Dynamic Configuration product is an internal set of systems that critically support and enable dynamic behaviour within the APIs. In 2018, as the Control Plane Platform organisation grew, I decided to focus on the Configuration systems. Typical examples of configuration are feature launch flags and resource limits. They are a relatively small piece of the overall Web Service architecture but they had not received as much investment as other systems. My decision to focus here was driven by 2 major points. First was that the lack of investment over the years resulted in these systems having a high operational cost. The immediate cost was in needing 3–5 dedicated engineers to keep the lights on and slowly iterate on project work to address the operational load (low severity but high volume and time to resolution). The second point was in the indirect cost to other engineering teams in dealing with a poor developer experience and in not being able to fully automate away the undifferentiated operational work across all teams. As an example, it would cost teams at least ~1 engineer week for an API feature launch and at least 2 weeks for a new region build. By the end of 2018 my team and I had reduced this aspect of region builds to a once-off onboarding cost and reduced API feature launches to ~1 engineer day.

At Amazon, there is a constant stream of company-wide internal investment and operational project work that I had managed within scope of my own products, and often involving multiple teams across different time zones. Examples of these included hardware upgrades/migrations, security related projects and new region builds and automation thereof. Together with Feature work, these required strong skills in work prioritisation, communication, driving architecture and work boundaries for teams, architectural dependency management, coaching individuals, developing and coordinating execution plans with different teams and ensuring high quality delivery of projects.

MIH International Projects - kalahari.net to kalahari.com

kalahari.net – was originally built using Microsoft's ASP Classic technology and I was brought in to join a team that was migrating all systems onto ASP.NET. The business used this programme to also innovate and improve numerous systems, all geared to meet the fast–growing business demand. I was fortunate to be handed the responsibility for building a bespoke and complex product catalogue navigation system. The high–level architecture was provided to me and I was successful in designing and building the 4 main components using C#, JavaScript and MS SQL. Components included a set of APIs that served the main retail website, an internal WebApp tool used by various product owners, and a change management tool that would publish changes to each catalogue into a live dataset backed by the last component, a MS SQL database. Over time, 2 new engineers were assigned to me to help on the project which we successfully delivered. Thereafter, I moved into the broader team that was responsible for the end to end Buying experience on the website using the same tech stack.

kalahari.com - A few months later, there were changes in leadership and the business made the decision to migrate onto a commercial ecommerce platform called Hybris. That is when my journey in Java, Spring Framework and architecting Enterprise systems began. I skilled up on the Hybris ecommerce platform and underlying Spring framework. As we progressed in the project, we grew out into individual teams led by each of us. We successfully deprecated the old .NET stack and migrated the entire business onto the new Java stack backed by Hybris, SAP systems and communicating over ActiveMQ. I regularly engaged with Product Owners, Business Analysts and Hybris/SAP consultants as the tech representative for the Buyer business.