ALI-AKBER SAIFEE

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"Turn up the signal. Wipe out the noise. Send out the signals, deep and loud." - Peter Gabriel

Professional Experience

• Wealthsimple, Burnaby, Canada

Senior Software Developer, Application Security and Posture Management

January 2024 - September 2024

Led key initiatives to enhance application security and reduce vulnerabilities.

- Built a company-wide input validation framework, minimizing attack vectors in public services.
- Removed redundant services and outdated libraries, streamlining security architecture.
- Identified and mitigated vulnerabilities through secure code reviews in critical internal projects and acquired code bases.

• Reddit, Burnaby, Canada

Senior Software Engineer

November 2020 - March 2022

Backend application development in the Anti-Evil (Safety) team

- Extracted reporting functionality into an isolated service exposed to the clients through GraphQL
- Built i18n support for the reporting service which was then adopted by various other services.
- Worked on automated classification of spam content
- Worked on solutions for detection & filtering of harassment and toxic messaging
- Optimized test suites to improve code coverage
- Optimized API performance of comment listing
- Migrated services from a puppet/vagrant based development environment to a production-parallel kubernetes managed workspace

Toptal, Remote

Team Lead / Backend Software Engineer

September 2017 - May 2019

Participated and led the development of internal tools and APIs for community & talent acquisition features.

- Implemented GraphQL API for mobile & web clients
- Implemented bot functionality to interact with customers over Slack.
- Optimized unit & integration tests to reduce time spent in continuous integration.

• Honestbee, Singapore

Director, Engineering

January 2016 - April 2017

Led the Devops, QA & Backend engineering teams in building an online grocery, food, home services delivery & concierge platform.

- Managed & provided technical guidance to Devops & QA Engineering.
- Led backend projects in Ruby on Rails, Golang & Elixir
- Mentored junior engineers
- Hiring and onboarding of the engineering team

• Zopim (acquired by Zendesk), Singapore

Director of Engineering, Quality & Operations / Software Engineer

October 2013 - January 2015

Integrated development best practices in to the SDLC & contributed to server application development.

- Implemented automated testing and continuous integration for Python & javascript applications.
- Implemented the public REST API for the Chat Service.
- Built a secure, segregated application & environment for credit card related payments.
- Performed maintenance and feature development for a heterogeneous group of Python applications built on Flask, Django, Celery & Twisted.

mig33, Singapore

Director of Sustainability Engineering

Director of Quality Assurance

January 2012 - April 2013

July 2010 - December 2011

Built development operations capabilities within the engineering team. Led and developed the Quality Assurance and Release Management team for the mobile client applications and the services it relies on.

- Transitioned & grew the engineering team after its move from San Francisco to Singapore.
- Refined the development & release processes used by the server engineering teams.
- Integrated & developed an automated & continuous build system complimented by automated testing.
- Implemented a Python interface to the mig33 service with the primary motivation to provide a client independent interface for integration testing of the mig33 service.

• Linden Lab, Singapore

Senior Quality Assurance Engineer

December 2009 - June 2010

Senior member of a distributed core Quality Assurance team, responsible for qualifying the simulator & server applications supporting the Virtual World services provided by the Secondlife platform.

- Conducted white box qualification of simulator server for major server releases.
- Created automated load & performance tests for validating web services for both front and back end applications.
- Built a framework around funkload to perform functional and load testing for web services. The framework was adopted rapidly
 into the development cycle and ensures early integration testing.
- muvee Technologies, Singapore

Senior Software Engineer (Quality Assurance) Software Engineer (Quality Assurance) January 2008 - November 2009 May 2005 - December 2007

Engineering lead for test automation, build & setup engineering for automated video editing applications and services.

- Designed and implemented a scalable testing framework that exposes a unified model for testing from the unit to system level.
 Subsequently took the framework from a proof-of-concept into the production cycle and successfully incorporated an automation driven build acceptance process for the company's flagship product.
- Migrated the desktop application setup and deployment system to a customized solution that integrated into the development cycle.
 This resulted in a modular, source controlled manifest of deployment that allowed for automated continuous builds of all product variants.
- Created a one-click build system and served as build-master for core product line and auxiliary applications and services.

Open Source Projects

coredis: Async redis client with support for redis server, cluster & sentinel.

Flask-Limiter: Rate-limiting extension for Flask

limits: Rate-limiting utilities for python

jira-cli: Yet another jira command line interface.

holmium.core: Page objects & Utilities for writing selenium test cases.

hiro: Time manipulation utilities for Python

sifr: Eefficient windowed counters for python.

flutter: Intelligent test selection based on code changes

Conferences

- Invited to speak at the Google Test Automation Conference (GTAC), 2007 in New York, USA.
 Presentation: muvee Framework for Autonomous Testing (muFAT)
- Invited to speak at the Research in Motion Test Automation Conference (RimTAC), 2008 in Waterloo, Canada. Presentation: muvee Framework for Auto[nomous/mated] Testing (muFAT)

Training

Bachelor of Engineering, McGill University, Montréal, Canada

Fall 2004

Major: Computer Engineering

Concentrations in Human Computer Interaction & Software Engineering Practice.

Minor: Management Studies

Highlights

- Created the speech interface of an automated door attendant using open source technologies (Sphinx) developed at CMU.
- Designed and fabricated an autonomous obstacle avoiding vehicle using PIC microcontrollers.
- Augmented a table tennis game into a virtually immersive environment playable solely through gestural interactions with the system.

Toolkit

Software Engineering & Quality Assurance

Programming Languages C, C++, Java, Python, Go, Perl, PHP, Ruby, Elixir & JavaScript.

Test Automation Funkload, Locust, Tsung, Selenium.

Application Development

J2EE JBoss & Spring Application Framework

Web Development Python web frameworks (Django, bottle, Flask, Pyramid, Falcon, Twisted & Tornado), PHP & Ruby on Rails.

Databases

Relational MySQL, Postgres & SQLite

noSQL Redis, Cassandra, Couchbase, MongoDB & Riak.

Caching Redis, Memcached & Mcrouter

Search Elasticsearch, Fusion & Solr

Message Brokers RabbitMQ, Kafka & ZeroMQ.

Software Configuration

Version Control Git, Mercurial & Subversion (I'm old enough to have used CVS and SourceSafe)

Continuous Integration Drone, Github Actions, Jenkins/Hudson, TeamCity, Tilt & Travis.

Deployment Spinnaker, Fabric, Chef, Puppet, Salt & Ansible.

Containerization Docker & Kubernetes.