# ALI-AKBER SAIFEE

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

# Nutshell

# 15 years

- Developing and designing Python applications & libraries
- Developing test automation solutions.
- Working in culturally & geographically diverse environments and teams.

#### 10 years

- Designing and maintaining software configuration management systems.
- Leading development and quality assurance teams to build, deploy and release backend, web & mobile applications.
- Maintaining and contributing to open source projects.

#### 4 years

- Developing C++ applications & libraries.
- Building Ruby/Ruby on Rails applications.
- Developing and maintaining Java server applications.

# **Professional Experience**

• Reddit, Burnaby, Canada

Senior Software Engineer

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

- Extraction of 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
- Optimization of 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

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

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

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.

November 2020 - March 2022

September 2017 - May 2019

January 2016 - April 2017

October 2013 - January 2015

# • mig33, Singapore

# **Director of Sustainability Engineering**

#### **Director of Quality Assurance**

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

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)

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

Major: Computer Engineering Concentrations in Human Computer Interaction & Software Engineering Practice.

Minor: Management Studies

Highlights

Fall 2004

December 2009 - June 2010

January 2008 - November 2009

May 2005 - December 2007

January 2012 - April 2013

July 2010 - December 2011

- 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, Jenkins/Hudson, TeamCity, Travis.

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

**Containerization** Docker, Tilt & Kubernetes.