

# 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

### 14 years

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

### 10 years

- Leading development and quality assurance teams to build, deploy and release backend, web & mobile applications.
- Authoring and contributing to various [open source Python projects](#).

### 4 years

- Developing C++ applications & libraries.
- Building Ruby/Ruby on Rails applications.

## Professional Experience

- **Toptal**, Remote  
**Team Lead** *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
- **Carousell**, Singapore  
**Senior Software Engineer** *February 2015 - August 2015*  
 Developed data warehousing and analytics processes & applications.
  - Implemented a messaging workflow around Apache Kafka.
  - Introduced a process for batch processing and performing data analysis using Google BigQuery.
  - Implemented a product recommendation engine.
- **Zopim (acquired by Zendesk)**, Singapore  
**Director of Engineering, Quality & Operations** *October 2015 - 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.
  - Authored the public REST API for the Chat Service.
  - Authored a secure, segregated application & environment for credit card related payments.
  - Led backend application development for a heterogeneous group of Python applications built on Flask, Django, Celery & Twisted.
- **Viki**, Singapore  
**Director of Test Engineering** *May 2015 - September 2015*  
 Acted as a hybrid Test Engineering & DevOps lead to assist with the migration and transitioning of the legacy monolithic Viki application to a self hosted, distributed and decoupled group of services.
  - Built an infrastructure management system to manage core services.
  - Transitioned core services from cloud providers to dedicated hosting.
  - Migrated video encoding services from SaaS providers to a hosted environment.

- **mig33**, Singapore  
**Director of Sustainability Engineering** *January 2012 - April 2015*  
**Director of Quality Assurance** *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)** *January 2008 - November 2009*  
**Software Engineer (Quality Assurance)** *May 2005 - December 2007*  
 Engineering lead for test automation, build & setup engineering for automated video editing applications and services.
  - Authored 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.

## 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 ([Sphinx4](#)) 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, JavaScript, Elixir & Rust.

**Test Automation** Funkload, Locust, Tsung, Robot Framework, Selenium, Multimechanize, IBM Rational Rose & Robot, Compuware TestPartner & QARun.

**Software Analysis** Code profiling and coverage WinDbg, Compuware DevPartner, Istanbul, Coverage.py & Sonar in C++, Python, PHP, Javascript & Java.

## Application Development

**Microsoft Windows** MFC, Visual C#, VB & .NET 3.0 WPF Application development.

**J2EE** JBoss Application Server (4.x, 7.x) & Spring Framework

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

**Frontend Web Development** React

## Databases

**Relational** MySQL & PostgreSQL

**Still looking for a good title** Redis, Mem[cache/base], Hadoop, ElasticSearch, BigQuery & Riak.

**Message Brokers** RabbitMQ, Apache Kafka & ZeroMQ.

## Software Configuration

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

**Continuous Integration** Jenkins/Hudson, TeamCity, TravisCI, Kinook Visual Build & MSBuild.

**Packaging** Maven, Ant, Nexus, Windows Installer SDK & Windows Installer XML (WiX), Macrovision InstallShield, NullSoft Scriptable Install System, Debian & RPM packaging.

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

**Documentation** Doxygen, Sphinx & TeX.

**Miscellaneous** Tinkering with Linux variants. Programming for fun.

## Open Source Projects

### Authored

[Flask-Limiter](#): Rate-limiting extension for Flask

[pyutrack](#): Python SDK / CLI for youtrack.

[limits](#): Rate-limiting utilities for python

[sifr](#): Efficient windowed counters for python.

[holmium.core](#): Page objects & Utilities for writing selenium test cases.

[hiro](#): Time manipulation utilities for Python

[jira-cli](#): Yet another jira command line interface.

### Contributed

[Funkload](#): a Python library for performing functional and load testing of web services.

[multi-mechanize](#): Performance and load testing framework.

[Fabric](#): an ssh enabled Python tool for performing application deployment and distributed systems management.

## Life in General

- Helped my father develop a free school for financially impoverished children living in the rural slums of Karachi, Pakistan.
- Performed community service at various non-profit organizations in Pakistan including a mental health hospital, a rural development program, a urology hospital and a school for aurally & visually impaired children.
- Worked, lived & played in various cultures and environments spanning Africa, North America & Asia.
- Inappropriately good sense of humor.
- Co-caretaker of one human, and three feline infants.