

ALI-AKBER SAIFEE

ali@indydevs.org

"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.

4 years

- Developing C++ applications & libraries.

3 years

- Developing and maintaining Java server applications.
- Building Ruby/Ruby on Rails applications.

Professional Experience

- **Reddit**, Remote
Senior Software Engineer *November 2020 - Current*
 Backend application development for the Consumer Safety team
 - Optimized API performance of comment listing
 - Participated in extraction of reporting functionality to GraphQL backed microservice
 - Implemented circuit breakers to protect highly visible users from abusive messaging
- **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
- **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 / Software Engineer *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.

- Performed maintenance and feature 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, Elixir & JavaScript.

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 Application Framework

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

Databases

Relational MySQL, Postgres & SQLite

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 Install-Shield, 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.

[djlimiter](#): Rate-limiting middleware for Django

[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

[nosedbreport](#): Nose plugin for recording test results to a database.

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

[rieapie](#): Generic REST api wrapper for Python.

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.

[PyOGP](#): a set of Python modules for interacting with OGP enabled virtual worlds.

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.