# **Prasad Shirvandkar**

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#### **EDUCATION**

Masters in Computer Science and Engineering - University at Buffalo, SUNY [ 3.1 / 4 GPA ] Aug 2021 - Present Coursework: Computer Vision, Algorithms, Parallel and Distributed Processing, Information Retrieval

**Bachelor of Technology in Information Technology -** V.J.T.I, Mumbai [ 7.57 / 10 GPA ]

*Aug 2015 - June 2018* 

**Diploma in Computer Engineering -** V.E.S Polytechnic, Mumbai [ 87.63 / 100 % ]

*Aug 2012 - June 2015* 

## **EXPERIENCE**

#### Morgan Stanley - Senior Associate Technology

Aug 2020 – Aug 2021

- Configured a master data ELK Stack setup at VM's secured with Open Distro on ElasticSearch 7 and indexed over **400k** events.
- Led a project to develop a microservices to manage cluster operations, query & manage data on ElasticSearch cluster. Enables multi host cluster connections and configuring a node health listener to monitor elastic nodes availability every second.
- Implemented a Parallel Executor to execute SQL queries from multiple databases in parallel resulting in 77%~ faster execution.
- Devised a configurable rules based solution to automatically trigger new notification workflows in system on rule match.
- Boosted search performance by **3X** by designing a cache scheduler to cache data at regular intervals and load it from in memory.
- Decoupled 35 tightly coupled gradle projects to be built and deployed separately, reducing build time for projects by 80%~.

#### **Barclays - BA3 Software Developer**

July 2018 – July 2020

- Created a stubs pipeline by developing a Generic Stub Tool to automate Stubs setup, making API Testing simpler, faster & easily deployable doing so within 1/20<sup>th</sup> the usual time.
- Developed a customizable browser cookie based sign-in solution conforming to PSD2 SCA standards, and implemented caching to make user logins easier, secure and 3X faster.
- Enforced high code reusability by optimizing the code, applying the best coding practices reducing the code size by 35%~. Also worked extensively on Unit Testing of code and JUnits with 100% Coverage.
- Resolved over 250 Critical Level Heap Inspection, Cross Site Scripting (XSS), and CSRF Security Vulnerabilities.

#### **TECHNICAL SKILLS**

- Programming Languages: Java, Python, Kotlin, C++, Dart
- App Development: Android, Unity, React.js, Flutter
- Tech Stack: Spring MVC & Boot, JUnit, Gradle, Firebase, Git, Tensorflow, ElasticSearch, Solr, GraphQL, REST, SOAP, Message Queue, DB2, MPI, Caffeine, Room DB, MVVM, PySpark, Flask
- Android Studio, IntelliJ Idea, Visual Studio Code, BitBucket, JIRA, AWS EC2, Azure DevOps, SonarQube, Postman, Docker

## SOFT SKILLS

• Decision Making Collaborative Adaptability Attention to Detail Self Motivation

# **PROJECTS**

## **Twitter Search Engine and Rhetoric Analysis**

October 2021

- Technologies Used: ElasticSearch, Python, Flask, NLTK, Twitter API, React.js.
- Spearheaded the project and engineered an end to end tweet search flow with content ingestion, topic categorization and language understanding based analytics. Formulated features like TF-IDF & relevancy, search highlighting and query translation.

## Simple Pictionary – Online Multiplayer Game

*April* 2020

- Technologies Used: Kotlin, Firebase Realtime Database, Web Sockets, Canvas API.
- Scribble Fun is an online multiplayer pictionary game to play between friends. It uses MVVM app architecture, Firebase API, Web Sockets and Observer – Subscriber models for syncing drawn data between multiple devices in real time.

## Scribber - Notes App

November 2019

- Technologies Used: Kotlin, Room DB API, Fingerprint & In-App Billing API, Firebase Services.
- Scribber is a quick and simple notes app connected to google cloud and syncs across devices using a google account. It allows users to secure notes using fingerprint, format text with formatting tools, pin notes to notification, widgets and todo checklists.

## Hand Drawn Sketch Classifier - ML Game

*May 2019* 

- Technologies Used: Kotlin, Python, Mobile-Net Model (Depth-wise CNN), Tensorflow.
- An Open Source ML Game based on doodling using a pre-trained classifier neural network to recognize drawn sketches. Devised an algorithm to generate scores based on how good/bad a sketch is drawn and steps up gameplay difficulty based on game level.

## Meteor Blitz - Android Game

December 2018

- Technologies Used: C#, Unity Game Engine.
- Meteor Blitz is an engaging yet challenging game about surviving meteor attacks on a distant planet. The game has a minimal, intuitive gameplay and uses modern UX, prefabs with instinctive handling controls and virtual particle system.

## **Permissions Handler - Library**

August 2017

Technologies Used: Kotlin.

An Open Source module which simplifies the Android Runtime permissions integration in any App. It allows developers to request multiple runtime permissions at once without writing complex code for it and validating permissions in background.

## **ACHIEVEMENTS**

- 'Going Above and Beyond' Recognition in just 2 months after joining Morgan Stanley for ELK Stack and Client Setup.
- Barclays Recognition Program (BRP) Award for developing a Generic Rest Stub API Testing Tool.
- Barclays Values Award for Excellence and Service for resolving a critical live issue in PSD2 Project in a short time.
- Ranked 5<sup>th</sup> among 100+ Participants in Code IT Suisse Hackathon organized by Credit Suisse.