PANKAJ SUBHASH YEWALE

New York 11209 • 551-221-6022 • psy231@nyu.edu • LinkedIn, Github, Portfolio

SUMMARY

- 3+ years of experience developing Web backend, REST API's and Android Mobile applications
- Designed several back end web services using technologies such as Django-python, Ubuntu, AWS, SQL, GitHub
- Experience in object oriented programming (OOP) concepts using Java and python on Ubuntu-Linux
- Good understanding of various Data Structures and Algorithms
- Well acquainted with Software development life cycle (SDLC) - Scrum - Agile Project management
- Experience in building, publishing and maintaining Android Apps on Play store from scratch
- Experience in working with various IDE's using PyCharm, Eclipse, PyDev, Intellij, Android and Visual Studio
- Quick learner, dedicated, hard working with proven ability to work independently and as team on miscellaneous projects

EDUCATION

New York University Brooklyn, New York — May '17
Master of Science Computer Engineering *(Computer Systems, Software Engineering)* — 3.5 GPA

University of Pune - Maharashtra Institute of Technology Pune, India — Aug '12
Bachelor of Engineering ECE *(Minor Computer Information Technology)* — 3.7 GPA

SKILLS

Primary	**Java**(Android), **Python**(Django), **SQL**, Ubuntu Linux
Tools	PyCharm, Eclipse, Android/Visual Studio, Screen, Postman, Jupyter, JIRA, Trello, Bitbucket, **Github**
Frameworks	**Android** SDK, **Django**, Celery, **REST** framework, Redis, Stripe, Pandas, **AWS**(EC2 S3 SQS RDS)
Secondary	React, Flask, PostgreSQL, HTML, C++, Numpy, Mapbox, GMaps, GCP

WORK EXPERIENCE

Web Backend and Mobile App developer — **Aug '17 - Present**
REVMAX Inc. (Seed Fund by BMW) **Brooklyn, New York**

- Designed and executed the back end data models and database schema for 'Transurban Group' - demand forecasting dashboard predicting daily highway trip and corresponding revenue for dynamic toll pricing model. Created secure browsable REST APIs for querying and retrieving the results, with documentation for internal integration using Python on Django Web Framework
- Developed and published 'SidewalkIQ' Android app that notifies Hourly foot traffic data coupled with weather updates in fast-paced development cycles - accomplished 100% of deadlines as per schedule
- Developed a client-profile admin-panel in python using Django Models, Forms, Templates, Views etc featuring auth, stripe, email-server, data engineering induced reports(pdf, csv, json) - reduced installation setup time by more than 60%
- Implemented location based extract-transform-load pipeline for processing geospatial Big data using pandas in python on Jupyter notebook. Handled edge and corner cases, fixing bad data patterns. Proposed a geohash proximity search approach that reduced processing time by more than 50% for a given location
- Structured the data models using Django for 'BMW-DriveNow' German car sharing service to track vehicles location and forecast day-wise demand and potential revenue. Worked with boto3, pandas and numpy python libraries to find key metrics and indicators in large dataframes. Deployed REST APIs on cloud platform for efficient data retrieval based on geohash location.
- Created python bash script that collects hourly data, validating and preventing bad data, from Weather-Underground and Foot Traffic Sensors(100+ NYC locations) to update the PostgreSQL backend asynchronously
- Designed an Android App that traces and records the routes traversed by a user on Google Maps featuring in Start/Pause/Resume/Stop controls, background tracking, navigation and storing history in local database.
- Developed basic front end client facing dashboards on data engineering projects using React/Redux
- Maintained the project codebase with Version Control tools like GitHub and Bitbucket actively
- Coordinated the code deployment to Staging/Production Environment with the Engineers and Manager ensuring Quality analysis
- Attended potential Client and Investor strategic meetings with Co-founders to document and draft product proposal including the business plan and tech-specs

Environment: Python, Django, Forms-templates, HTML, CSS, Celery, Pandas, Java, Android, Firebase Cloud Messaging, PostgreSQL, SQLite, Stripe, Boto3, AWS EC2 RDS S3, REST framework,terminal, Cronjob, JSON, Bash, *GMaps,* SQLite, Screen, Postman, Jupyter

Backend Engineer Summer Intern — Jun '16 - Aug '16
Authorized Revolution Technologies Inc. (HaloLoop) - **Marina Del Rey, CA**

- Designed and engineered the back end system for Inspirational Live Streaming Social Platform - 'HaloLoop' using Django web framework. Built and deployed REST APIs on AWS EC2 instance used by Web/IOS/Android Beta App
- Setup an admin panel for efficient data update, storage and entry using Django Admin, Forms and Templates in HTML/CSS

- Organized and managed weekly sprint tasks using Software management tool JIRA and Trello to keep track of deadlines
- Demonstrated the working of Beta App with potential future updates in a Pilot program to other developers and Manager
- Integrated Stripe and OpenTok SDK for high quality interactive video and voice sharing services in python

Environment: Python, Django, REST, MySQL, Bitbucket, AWS EC2 RDS S3, Java, Android,, Stripe, TokBox SDK, Trello, Moxtra

Software Engineer - Member of Technical Staff   Feb '13 - Aug '15
Shoptimize Pvt Ltd. (Funded by Tandem Capital) **Pune, India**
- Reinforced the backend by tuning Django data models for an e-Commerce Social Networking Web App - 'Cooliyo' 1M+ User base
- Integrated web/mobile analytic SDKs in Python and Java to monitor user actions providing insights that improved DAU, UI experience, user engagement by more than 15% and mobile app downloads by 25%
- Built and packaged Alpha/Beta Android APK's in continuous test and deploy chain with Dev/Prod Model for feature releases
- Built an automated email marketing campaign using Mandrill-Python extension with customizable delivery time and content - Notified about 0.5M users with exclusive deals and trending posts boosting DAU by more than 20%
- Modeled a monitoring system using Time series OpenTSDB-Python library - Analysis helped scale Facebook Post Reach from 10K to 0.5M users and reduce FB marketing ads cost by 30%.
- Derived RESTful services using Django-Oscar to extend 'In-App cart/purchases' enabling client affiliate program providing 15-20% profit-margin per product purchase
- Utilized PyUnit, the Python unit test framework, for all Python applications
- Design and built a web crawling and scraping project for data extraction purpose using Scrapy-Python framework
- Successfully deployed a static Shoptimize website using WordPress/HTML/CSS to AWS S3   a
- Debugging of local and staging API issues occurred during Quality Analysis of Mobile and Web apps in critical situations
- Prepared well versed technical REST APIs support documentation and user manuals for all web/mobile apps

Environment: Django-python, REST framework, Ubuntu-Linux, Pycharm, Nginx, uWSGI, Celery, Redis, MySQL, LAMP stack, OpenTSDB-HBase, Facebook Graph, AWS S3 SQS RDS, Boto3, Mandrill, Android-Java, XML, Android/Visual Studio, Eclipse, Intellij, Mixpanel, New Relic, Amplitude, Wordpress, Scrapy-python

SELECT PROJECTS

SidewalkIQ - Led an IoT based Web Project - quickest way to get sidewalk traffic in NYC with high accuracy (~92%) at less cost - Setup an Intermediate server for storing sensor raw data for efficient cleaning and data processing purposes. Deployed a main server with REST APIs that serves data to Web/Mobile apps after extrapolating the number from sensor raw data
(Django, Redis, Java, PostgreSQL, Celery, AWS)

MIPS Processor - Structured and designed single cycle processor components to execute a set of assembly language instructions. Wrote assembly codes for Round Key generation, Encryption and Decryption algorithms to implement 'RC5 Block Cipher'. Implemented 'assembly to machine code' compiler for efficient generation and burning of machine code onto the processor
(C++, Python, Assembly, VHDL)

Cooliyo - Published an e-Commerce Android app (4.2+ rated, 0.5M downloads) featuring social media login(Django Auth, Google, Facebook), deep linked push notifications that provides a provision to open links in-App over web browser, search and filter based on categories or subcategories, order checkout, tags, save products for personalized experience and follow people with similar interests, continuous feed updates and submit product links to get featured   *(Java, Android, Play Store)*

Guitar Tablature - Generated Tab/Chord notes using Digital Signal Processing of recorded Guitar audio clip for Joint Time Frequency Analysis - Implemented several Transforms for feature extraction. Fourier (base model to detect frequency against a signal), Short Time(detect all the notes played in a single audio clip), Wavelet(detect the amplitude of a particular note played in an audio clip with multiple strings played at times) and Hilbert-Huang Transforms(detect several notes that constitute a chord)   *(MATLAB, C++)*

HONORS/AWARDS
$10,000 NYU International Graduate Engineering Scholarship, 2015   *(New York University)*
Best e-Commerce Mobile App experience Award at e-Tailing Expo, 2016 Mumbai India   *(Shoptimize Pvt Ltd)*
Undergraduate consistent high academic performance Honor(above Distinction class), 2012   *(Maharashtra Institute of Technology)*