# **Goutom Roy**

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# **Career Objective**

I am a full stack developer and a big fan of free and open source software. My experience primarily lies with the use of Python, Django (a Python based web framework), Android application development and managing various AWS services such as EC2, S3, RDS etc or any linux servers. My interest is being involved in every phase of the software development process. I have 5+ years of experience in Python/Django with 7+ years of experience in Android application development.

#### What I will do:

- 1. I will be prototyping of your idea.
- 2. I will write restful apis using python(Django).
- 3. I will write test cases and documentation for apis.
- 4. I will upload project to amazon or any linux server.
- 5. I will write efficient, maintainable and reusable code for android application.

# **ACM (Association for Computing Machinery) Programming Skills**

- Most of my university life I spent on ACM programming in <u>UVA online judge</u>, <u>Sphere Online Judge</u>.
- 2. Solved 486 problems using C, C++, STL and about 96 solutions are pending as PE(presentation error).
- 3. My UVA profile can be found <a href="here">here</a>.
- Attended countless online, local programming contests with team or personally. I attended in NCPC (National Computer Programming Contest) and ICPC (International Computer Programming Contest) on behalf of <u>Shahjalal University of Science and Technology</u> with my team in 2008.

## **Areas of Expertise**

**Programming Languages:** C, C++, Python, Java

Databases:Redis, PostgreSQL, MongoDB, Neo4jPlatforms:GNU/Linux, Windows, Android

**Backend Technologies:** Django, RESTful web services using DRF, Django Channel 2,

asyncio, Aiohttp, Celery, Gunicorn, Nginx, Memcached.

Frontend Technologies: Android, Aiohttp, JSON

Tools: Git, SSH, Bash, Google Flavored Markdown, PyCharm, Android

Studio, Eclipse, vi, pgAdmin, SQL Developer, LibreOffice writer,

Microsoft Office

laaS/PaaS: AWS EC2, Heroku, DigitalOcean

# **Professional Projects**

# **Work Japan**

A job seeking application for foreigners in Japan.

Firstly my responsibilities was to write whole android application and launch it in playstore with existing apis then handover the code base to a junior android developer to maintain it and keep guiding him to fix bugs and implement new features. After that I moved to server team where I wrote code for interview time scheduling api service, building admin interface, user profile management, notifications service apis, user's job application management section.

Technology used: Django, django-rest-framework, celery, redis, postgresql, nginx, FCM, gunicorn, ec2

You can check the product here.

#### **Smart Home**

It is a IOT project for controlling BLE enabled light, curtains, fan with mobile bluetooth or wifi.

I was the part of the android team. I was responsible for adding, controlling all wifi enabled devices (light controller, light sensor, curtains) to this application. I was also responsible for defining communication protocols between mobile and our devices along with my project manager.

Technology used: Android Sdk, mgtt paho client, mgtt mosquitto server, mesh network.

You can check the product here.

### **Car Inventory**

Second hand car information warehouse builder for carvision.

This project has two parts android app and server. Android app scans car's barcode/qr-code when arrive first in the garage to sell. After scanning, it sends value to server then server hits few third party paid apis for its complete mechanical information and stores it in our database. Wrote restful api services using those data for frontend team so that later they can be shown to customer by searching.

Technology used: Android Sdk, Django, django-rest-framework, postgresql, nginx, gunicorn, DigitalOcean

This inventory was only used by company's admins and sells mans.

# **Employee Tracker**

Tracking worker's check in and check out with face detection capable tablets and generate salary or payment.

This project has two android apps, one for registering new worker, set preferences and other one for tracking workers entry or exit. A tablet will be hanging in front of the door of office with an app with face recognition capability. When a worker comes app recognize the person and make an entry/exit entry in server. It has very good admin panel which shows workers salary/payment based on entry/exit for both permanent or hourly workers. It sends email to workers every month with their salary information.

Technology used: Android sdk, Snapdragon Face recognition sdk, Django, django-rest-framework, postgresql, celery, nginx, gunicorn, digitalocean

This service was built for <u>carvision</u> and only used by company's admins.

# **Thrifty Hipster**

World's first Happy Hour search engine that went steps beyond traditional media and utilizes innumerable levels of caching, searching, server optimization, code bases, and data collection methods.

I was a part of 5 developer team. My responsibility was writing apis and maintaining frontend (android, ios, angular) team. I developed few features for android too.

Technology used: Django, django-rest-framework, postgresql, nginx, gunicorn, Linode.

You can check the product here.

#### GoFresh

An ecommerce application to connect all the super shops of Bangladesh.

I wrote admin panel, apis for mobiles and android app of this project. Default django admin panel was used here and has most of the ecommerce functionalities. This project is still ongoing.

Technology used: Django, django-rest-framework, postgresql, nginx, gunicorn, DigitalOcean

You can check the product here.

# Wordforge

A Localization tool.

Wordforge is a Sourceforge.net project which is a localization tool targeted for easing the process of localization by providing many automated features. My job is to carry out research and implement

new features in this tool (Wordforge) that accelerates the whole localization process, ensures error free localization and enables novice localizers to localize with ease.

Technology used: python, pyqt.

The details of the project can be found <u>here</u>.

#### **Dhaka Marathon**

Runner tracking app.

Developed a offline app to track runners elapsed timing scanning qr code when they come to final points and generate final result report.

Technology used: Android Sdk, Zxing barcode scanning library, sqlite

Project website is **here**.

## **Undergraduate thesis**

Titled "Pattern matching algorithm analysis and their implementation on bioinformatics" Based on the analysis of different multiple sequence alignment algorithms and their performance measurement on building phylogenetic tree.

### **Job Experiences**

WORK JAPAN Co.,Ltd As lead Android developer as well as backend

service developer.

July 2017 to present.

AplombTech BD Ltd. As a Android Developer.

February 2016 to June 2017

Thrifty Hipster As Full Stack (Python, Django, Android) Developer.

March 2014 to January 2016

SurroundApps Inc. Ltd. As a Python/Django Developer.

November 2012 to February 2014

Ankur ICT Development Foundation As a Python Developer.

January 2010 to September 2012

## **Education**

2005-2010, Department of Computer Science & Engineering , Shahjalal University of Science and Technology.

# Reference

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