#### **RESUME**

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# **Career Objective:**

I would like to utilize my skills effectively in the company that I work for and acquire knowledge and experience with the benefit of the company and my career.

### **Career Summary:**

- Having 3.8+ years of experience in developing web applications using technologies such as
  Python, Django, Flask, REST API, Python Scripts, Chat bot.
- Having experience in cloud technologies such as AWS and GCP.

# **Professional Experience:**

Company: DIMA Business Solutions, Coimbatore, India

**Designation:** Software Engineer – **November 2019 to Current** 

#### Works, Roles and Responsibilities:

- Working as an Automation based Network Security Software programmer.
- Network Security and IT infrastructure Automation.
- Developed web applications and REST-API using Python, Django, Flask, HTML, CSS.
- Developed Dima Antivirus desktop application using Python, Tkinter, Kivy with API calls.
- AI Chatbot and WhatsApp Chatbot integration using Python.
- Web Server Configuration with Nginx.

Company: Veradis Technologies, Coimbatore, India

Designation: Software Developer (Web Development) - August 2017 till November 2019

#### Works, Roles and Responsibilities:

- Requirement analysis, design and software tools analysis.
- Algorithms implementations using Python, Numpy, Pandas, scipy, sklearn.
- Familiar with AWS and its services such as S3 & lambda, etc.
- Developed web applications using Python, Django, MPLD3, Matplotlib, C3.js, HTML, CSS.

# **Projects:**

# 1. DIMA Warrior Internet Security (DNS) and Proxy:

The purpose of this project was developing Internet Security for Home/Individual, Small startups and Educational Institutions. Platform which we used for this project was **Python**, **Shell script**, **Bind9**, **Squid Proxy Server**, **Twilio**, **WhatsApp**, **Flask**, **Django** and web servers like **ngrok**, **Nginx**.

The tasks involved during the development,

- Automating tasks to extract the data using **Selenium**, **Beautiful Soup and Scrapy**.
- Creating the automation tasks for monitoring the product status and updates using Python and Crontab..
- Creating the web applications using Python, Django, Flask.
- Creating the WhatsApp Chatbot and Website AI Chatbot using Python, Flask, Twilio.

# 2. DIMA Emperor (Malware/Phishing and Webpage content categorization):

The purpose of this project is developing the API to serve responses for various DIMA Products like Firewall, DNS, Browser Extensions, Antivirus Software, Proxy, etc.

By predicting this, clients can block internet access as per their organizations rules.

The tasks involved during the development,

- Creating models with the help of Natural Language Processing and text multi classification to predict web page content category. Scraping web page data to create data sets for more than 40+ categories like porn, violence, alcohol, social media, etc.,
- Creating algorithm with 25+ rules to detect Malware/Phishing web content with the help of data science techniques some algorithms are like Domain Info, Web Content, Page Rank, etc.,
- Collecting malicious MD5 hashes from Open Sources and Trusted partners of DIMA and serving those results to DIMA Antivirus Software.
- Creating API with the help of Flask.
- The DIMA Emperor API will server our DNS, Firewall, Browser extensions, Antivirus Software and Proxy.

#### 3. DIMA Antivirus Software:

The purpose of this project is to develop lightweight Antivirus software to prevent, detect, and remove computer viruses like Malware, Trojan, etc., The software deals with API calls. So It will not affect the client machine performance. The Internet is mandatory for this antivirus software. The platform which we used for this project was Python, Tkinter, Kivy, Watchdog and DIMA-Emperor API.

The tasks involved during the development,

- Designing the application architecture.
- Creating a Desktop application.
- Designing the front-end template using Tkinter and Kivy.
- Creating Business logic for Monitor, Detection and Cleaning the client machine.
- Converting Python code into Packages for clients.(Win .exe, macOS- .app, Linux snap/.deb).
- Skills Used: Python, Tkinter, Kivy, Pyinstaller, Inno Setup, Py2App, etc.,
- Operating Systems: Windows, macOS, Linux.

# 4. Internet of Things (IOT):

The purpose of this project is developing the dashboard to monitor and analyze the behavior of pressure and temperature monitoring sensors. The platform which we used for this project was Python, AWS (S3, Lambda, IOT core, SQS, CloudWatch, Ec2) and devices such as (Raspberry Pi, BME280 and OneWire sensors).

The tasks involved during the development,

- Creating things in AWS core.
- Design Shadows to monitor and control the device.
- Writing a Python script to automate routine tasks like storing the sensor values in AWS S3,
  update client devices via remote job using AWS, MQTT protocol.
- Design the scheduling task using AWS Lambda.
- Processing the data which is stored in AWS S3 and creating visualization using Python, Django.
- Automating tasks to perform ETL (weather data).
- Libraries used in the project were sklearn, scipy, pandas and numpy.

### **Technical Skills:**

**Programming Languages:** Python, Java **Databases:** SQLite, Postgresql, MongoDB

Web Development: Django, Flask, JavaScript, Jquery, HTML, CSS

Web Server: Nginx, ngrok

Operating Systems: Windows, Linux (Ubuntu, Centos, Mint), macOS

Cloud Platform: AWS & GCP

Version control tools: SVN, Bitbucket

Other tools: Postman, Docker

#### **Education:**

Master of Computer Applications from Sri Krishna College of Engineering and Technology,
 Coimbatore, Tamil Nadu, India. (Year of passing 2015)

Bachelor of Computer Science from KG college of Arts and Science,
 Coimbatore, Tamil Nadu, India. (Year of passing 2012)

#### Ref:

- ➤ LinkedIn <a href="https://www.linkedin.com/in/parthiban1230">https://www.linkedin.com/in/parthiban1230</a>
- > Stackoverflow <a href="https://stackoverflow.com/users/8912663/parthiban-soundram">https://stackoverflow.com/users/8912663/parthiban-soundram</a>
- ➤ Portfolio https://parthibansoundram.github.io