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Career Objective:

To design, architect and build robust, optimized and scalable solutions by leveraging my skills and expertise as a developer, in order to facilitate business, achieve their objectives.

Work Experience:

1) **Vector Informatik**, Bangalore (Dec 2016 - Present):

- **Type Info Viewer: (Apr 2019 – March 2020)**
  - **Built** a desktop GUI application as an **individual contributor**, in Python using **PySide** library, to analyze the source code and variables of source files.
  - Incorporated **MongoDB** to store the data related to variables corresponding to each source file.
  - Data is read from DB and displayed on the GUI in the form of tooltip when a variable is hovered upon.
  - The application is **scalable** in terms of no. of source files and no. of variables in each file.
  - Dynamic context menus are made available for each variable to open their respective declaration files in new tabs.
- **Analytical Browser App: (May 2019 – July 2019)**
  - **Developed** a browser based analytical app to display interactive plots to analyze the performance of our product.
  - The application is written in **Flask** framework of python.
  - **Designed** the **RDBMS database** to store the product performance data.
- **Automation Testing Framework: (Dec 2016 - current)**
  Description: This framework is used for end to end automated testing of our product VectorCAST. The framework is written in Python. This framework is designed in a way that it can test our product's GUI application as well as command line application.
  Responsibility:
    - Analyze the newly developed and old features of VectorCAST.
    - Write test plan for those features.
    - Improve the testing framework to be able to automate the tests on both GUI and command line.

2) **Accenture Services**, Bangalore (Nov 2015 – Nov 2016): Worked in software development field using **C++** for a Germany based telecom giant**.**

3) **Accenture Services**, Bangalore (Aug 2014 – Oct 2015): Worked as a QA in functional testing field for a Germany based telecom giant.

Trainings:

1) Accenture Services Pvt. Ltd. (Apr 2014 – Aug 2014): Worked as Software Developer Intern.
2) DreamTeam Technologies Pvt. Ltd. (Jun 2013 – Jul 2013): Worked as a Software Developer Intern.

Skills:

1) Software Development:
   a) Languages: **Python**, C++, and C
   b) Data Structures and Algorithms
   c) Tools/Libraries: **Plotly-Dash**, **PySide**, Squish, GIT, Putty, FogBugz

2) Web development
   a) **Flask**, REST APIs, HTML, CSS, Java script
   b) Database (SQL, NoSQL): Oracle, MySQL, SQLite, MongoDB
   c) Tools: SQLyog, Xampp
   d) ORM: SQLAlchemy

3) Testing: Functional Testing, System Testing, End to End testing, Regression Testing

Education:

Qualification	Institution/Board	Year of completion	CGPA / %Marks
B.Tech. (CSE)	VIT University, Vellore	2014	8.4
12th	Central Academy School, Kota	2010	79.2
10th	Govt. Sr. Secondary School, Sawar	2008	84.8

Weekend/Academic Projects:

1) **URL Shortner**: Implementation of URL shortening service using MD5 hash and BASE62 encoding.
   https://github.com/242jainabhi/URL_Shortner.git
2) **BlackJack:** Low level design of BlackJack game.
   https://github.com/242jainabhi/Object-Oriented-Design/tree/master/Design%20Blackjack
3) Linux Commands Simulator:
   https://github.com/242jainabhi/LinuxCommandsSimulator
4) In-memory SQL like Database:
   https://github.com/242jainabhi/In-Memory_SQL_Database

5) **Prevention of SQL Injection Attacks: @ VIT University**
   a) Description: This project provides a solution for SQL Injections. SQL Injection refers to an attack wherein an attacker can execute malicious SQL statements which controls a web application's database server. By leveraging an SQL Injection vulnerability, given the right circumstances, an attacker can use it to bypass a web application's authentication and authorization mechanisms and retrieve the contents of an entire database. SQL Injection can also be used to add, modify and delete records in a database, affecting data integrity.
   b) Responsibility: My responsibility was to develop an efficient and optimized algorithm which can detect a repeated attacking pattern and learn a new attacking pattern. Patterns were detected using regular expressions. Detected patterns were then added in a database table using **bloom filters**. I also designed the database and UI for the project which were used to simulate the attack.

6) **Screen Flags: @ VIT University**
   a) Description: Screen Flags is a Bookmarking Application. An application using which a user can store bookmarks in the form of thumbnails or screenshots of webpages. These bookmarks are secured and accessible from anywhere, independent of machine and browser. If a user wants to bookmark a webpage, she can add the URL of the webpage in this tool, eventually a screenshot of that webpage will be generated and displayed.
   b) Responsibility: To build end to end application to accomplish the task of generating and storing flags. A service called "Web Shrinker" was used to generate the flags when provided the URL. These flags were them stored into the database for the respective user.

7) **Admission Management Tool: @ DreamTeam Technologies**
   a) Description: This tool was developed to ease the admission process of a student. Colleges and Schools would use this tool to manage database of students, teachers and courses which students have opted. When a student is selected, this tool would display student's personal info, parent's details, subjects and courses opted, and teachers associated with subjects.
   b) Responsibility: I was given a task to develop an API which would communicate with database and fetch required data. This API was written in PHP, which would read request from client and pass that request to the server. Then server would further communicate to the database to fetch the required data. This data would then be displayed at client side.