PYTHON DEVELOPER

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CAREER OBJECTIVE:

To obtain a respectable position in your organization which will enable me to use my talents, creativity and ability to the maximum and contribute to the growth of organization as well as myself.

PROFESSIONAL SUMMARY:

- Having **2.5 years** of experience in developing applications for mechanical engineering using **Python**, **XML and C sharp** technologies.
- Customizing **ANSYS** using **Python** on its inbuilt **Iron Python Framework**.
- **WinForms** used for creating user interface. **Xml** used to integrate python scripts.
- Hands on experience on designing and developing codes in open source technologies.
- Proven ability to quickly learn new technologies and apply them in business solutions.
- Developed tools to Analyze the **Aero Engine design**. And experienced in working with various Python Integrated Development.
- **ACT API, APDL macro** commands are used to develop some modules.
- Got appreciations from **Clients** for product performance
- Team player with ability to communicate at all levels of development process.

PROFESSIONAL EXPERIENCE:

- Worked as an **Estimation Engineer** in **Bharat Electronics Limited** *(A Govt. of India Enterprise, Ministry of Defense)* from **Feb 2016 to Feb 2017.**
- Currently working as **Application develop analyst** in **Honeywell** technologies solution from **Jan 2019 to Present**.

EDUCATIONAL QUALIFICATION:

- B.Tech(Mechanical) from **Karpagam University** in 2015 with 80.51%.

Operating System	WINDOWS
Languages	Python, XML
Frameworks	Iron Python
Build Tools	ANSYS Workbench, Solid works, ACT API, APDL Macros, WinForms
IDE's	Visual studio, Notepad++
Version Control Tool	Tortoise SVN
Project methodologies	Agile

PROFESSIONAL EXPERIENCE:

Project Title :   **ANSYS Customization tool Projects**
Client   :   **Honeywell**
Role   :   **Developer**
Technologies :   **Python, ANSYS ACT**

Project 1: Combustor Suite

Project Description: This project consists of three tools useful on engine combustion analysis. All the tools work in Static structural and Steady-state Thermal. First tool to find the crack path for geometry. In this tool background two standalone applications (ANSYS and NASGRO) were integrated and Two different technologies (Python and C-sharp) were integrated to build. Second tool to find thermal boundary condition. Third tool is to find Oxidation life of the model respect to material, time, and temperature.

Project 2: TurbDes

Project Description: This Project consists of various modules used for various application. Each module has group of features required to perform analysis of Turbine blade. Module for 2D and 3D analysis were made. Module built for each part of the turbine. This application generates the result in various format like Graphics animation, gradient, Campbell diagram, tabulated data and generated result.

<u>Project 3:</u> Ansys WB toolkit

Project Description: This project consists of various tools useful on design, mesh, analyze the multiple part of Aero systems. It creates multiple part for given input specifications in design modeler, Add mesh properties required for multiple tool created parts and tool to modify the mesh, And add loads and objects to the part to be tested. APDL commands were used at backend to perform analysis.

Roles & Responsibilities:
- Understanding the requirements as per Customers and Users.
- Python used to develop the Tool.
- ACT API's used along with Python to communicate with ANSYS on runtime.
- Used Iron python as framework to connect python code with ANSYS Tool.
- Using Visual studio to debug the code.
- Using SVN to Check-in the code to production.

Project Title: Design optimization of shell & tube heat exchanger with helical baffle.

Abstract: Implementing new design on shell & tube heat exchanger by changing process variables such as baffles, tube arrangements, materials, etc. on conventional design.

Project Title : Updating features of spring testing machine

Abstract: Additional features on safety, maintenance, and result generation are fixed on the spring testing machine and the result obtained successfully.

Personal details:

Date of Birth   :   24/01/1994.
Languages   :   English, Tamil.
Nationality   :   Indian.

M.VENKATESAN