

Summary

Strongly focused, dedicated professional software developer with 4years + experience with the ability to complete tasks accurately in a fast-paced environment with conflicting deadlines.

Experience

Kenstel Networks Pvt. Ltd.

Senior Python Developer, New Delhi, Delhi

10/2021 - Present

- Developed the firmware (backend) in python language of the software solutions for various networking products that were home router, enterprise router, ONT/OLT. Firmware functioned on top of linux based architecture OpenWrt in real time getting user data speed and data traffic control and routing in the hardware.
- Knowledge on writing shell scripts, and other languages like lua-luci, a software for embedded devices and web user interface.
- Comfortable to work in linux OS.
- Extensively worked on Apache web servers and basic knowledge of Http Server, SFTP Server, FTP server.
- Created APIs for the various functionalities of hardware system.
- Basic knowledge writing queries for mysql database.
- Development and deployment of Android and iOS application with MVVM architecture for the same hardware system in xamarin framework using C# language. Created APIs for the app to interact with the router on a server.
- Frequently used Version Control System: Git prior to deployment of the software.

Oceanic Fitness Pvt. Ltd.

Python Developer and Consultant, Mohali, Punjab

01/2021 - 09/2021

- Water Treadmill Project (for Horses, Physiotherapist) Developed application software in Python for Water Treadmill which included guided control over hardware and user friendly screen designs for the functioning of the machine.
- Designed frontend and devdeloped backend of the application for regular treadmill machines in Raspberry Pi which controls the features of treadmill via touch screen or any other screen attached to it.
- Coded Python program for Raspberry Pi featuring data acquiring, manipulation and calculation in real time, designed the user interface for touch screens of different sizes in python.
- Programmed microcontrollers Arduino Uno and Arduino Mega in C/C++ for reading real time data using infrared sensors and also using servo motors rotating IR sensors integrated with the treadmill.
- Implemented Serial communication protocol and Modbus communication protocol for acquiring digital signals from IR sensors to Arduino and then on Python in real time for further calculations and transmitting the data to Human Machine Interface device.

Self-Employed

Freelance Software Developer, Delhi, Delhi

07/2020 - Present

- Built various user-friendly fitness applications in python for Raspberry Pi and integrated them with various Treadmill machines.
 - The project included data transmission and data communication through serial port and GPIO pins of Raspberry Pi with Arduino Uno in real-time.
 - Timely coordinated with the Director of the company on the project status and requirements to fulfill the needs of the same. Independently completed the projects within a given timeframe.

- Developed a Native Android application meeting client requirements and specifications in Xamarin Visual Studio C#.
 - Worked on over 3 android applications which included code optimization, reduction in apk size, testing for the bugs in the code.
 - Timely reporting the status of the progress with the clients through email and skype communication.

Labat Asia Pvt. Ltd.

Software Developer, Mohali, Punjab

01/2019 - 06/2020

- Developed and deployed hybrid software application for the Raspberry Pi 4 device which had operating system Raspbian (linux) .
- Created Responsive Front-End (UI) of the software in HTML, CSS, Bootstrap and JavaScript for various screen sizes.
- Coded Python Scripts for Back-End of the software which involved USB data communication between the hardware and the software, logical calculations, real-time graph plotting and other features.
- Integrated it with Sqlite Database management system to store records locally on the device.
- Integrated it with Electron framework for cross-platform software to increase serviceability and produced performance data.
- Designed and developed native cross-platform software application for Android using Xamarin.
- Developed and maintained the software for windows os with SDLC approach in Visual Studio (C#) to work in sync with the hardware device (Audiometer) which had various components like real-time graph plotting, report generation, patient database management system for various Audiometry tests.
- Project: Brain Evoked Response Audiometry
- Plotting the high speed data acquired from brain signals with accuracy in real time.
- Worked on data transmission protocols FTDI in this project.
- Project: Audiological Platform
- Worked on USB data transmission protocols in this project.
- Code optimization and Code Testing, looked for bugs for error free release.
- Collaborated with RnD team to evaluate and optimize the interconnected workings of hardware and software.

Skills

Javascript, HTML, JAVA, Mysql, CSS, C#, .NET, C++, Python, Machine Learning, Android

Education

B.Tech in Computer Engineering

Punjabi University, Patiala, Punjab

05/2017

- CGPA 5.75
- Took part in NSS camp organised in the University.
- Actively took part in the cultural fests and other various events organised in the University Campus.

CBSE Class XII

GMSSS-37, Chandigarh

05/2013

- 84.4%

ICSE Class X

St. Stephen's School, Chandigarh

05/2011

- 76.14%

Languages

