MANJINDER SINGH

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A highly organized IT professional with experience coordinating multiple projects from front/backend development and executing tasks in order to meet key milestones within realistic and time-targeted goal. Skilled in Agile testing methodologies, Analytical Skills, and Requirements Analysis. Also, recognized as a skilled leader who identifies high-potential opportunities.

Skills

LANGUAGES & FRAMEWORKS

Ruby
Ruby on Rails
Javascript
JQuery
Ajax
HTML5
CSS
Sinatra
React
C++
C#
Assembly

METHODOLOGIES

Object Oriented Development
Test Driven Development
Agile Development

Education

New York City College of Technology Jan. 2017 to May 2019
BTECH Computer Engineering 2019

New York City College of Technology Aug. 2013 to Jan. 2017
AAS Electromechanical Engineering

Educational Background

Computer Engineering

- Microcomputer architecture and the basic concepts used in the Personal Computer (PC) using C programming language.
- Assembly language programs to utilize and gain insight into machine level operations.
- Applications of principles of electrical circuit analysis to the solution of practical network problems, with emphasis on steady-state AC Circuits.
- Using Analog and digital techniques to take into account standards, precision, accuracy and sensitivity in the data-acquisition process.
- Programming concepts and software development techniques for computer controlled systems.
- Technologies, protocols, and techniques used to connect a computer network with other networks through the use of gateways.
- Local Area Networks (LAN) and Wide Area Networks (WAN) implementation, wireless networks implementation, network security, advanced switching and routing configuration, advanced TCP/IP configuration, and network management.

Electromechanical Engineering

- Understanding electrical circuits, IC chips and their implementations.
- Coding with python and C/C++.
- Diagnosing/troubleshooting computer hardware and software issues.
- Creating 3-Dimensional designs using computer aided drafting.
- Developing embedded systems.
- Electrical manufacturing processes
- Developing IOT devices
- Understanding of mechanical hardware aspects and gear operations within PC.
- Advanced mechanics of pneumatic and hydraulic systems.
- Setting up multipoint communications
- Study of OSI and TCP/IP models, data transmissions, transmission media, network topologies, network cabling system, IP addressing, TCP/IP suite, local area networks (LANs), wide area networks (WANs), wireless network, and network security.

DB, TESTING & VERSION CONTROL

PostgreSQL
SQLite
ActiveRecord
RSpec
Git
GitHub
Arduino

Employment

Freelance Web Developer/Designer

Web Developer/Designer — Mar. 2017 to Present

- Creating Web Sites for clients using HTML, CSS, Javascript, Ruby on Rails, jQuery.
- Used the latest features of bootstrap for a clean UX experience
- Managed client relationships, and finances and created timeline for projects.

Projects

Mood Lamp

- Developed an IOT device using the ESP32 micro-controller with onboard Bluetooth and WiFi.
- Used Arduino IDE to configure proper drivers and implemented C++ as the programming language to control those drivers.
- Developed code from scratch and implemented the onboard WiFi to turn on and connect to the IOT device using a WiFi script.
- Implemented RGB LED parameters and scopes
- Implemented an IOS to connect to the device over WiFi that controlled light settings such as brightness/Toggle Switch/Dancing Lights.
- Implemented a mood sensor mechanism.
- Developed hardware using 3D printing
- Using IOT device technologies to make it user friendly and consumer cost effective.

Lava-Typers

- Lava-typers is a javascript game that allows users to practice and improve their typing speed and accuracy through a fun and competitive game.
- This website was designed using Ruby on Rails, CSS, Bootstrap, Javascript, JQuery and postgresSQL.
- Set up database schema design and help implement React to front end.

Holiday Show PI

- Using Linux operated device Raspberry Pi.
- Used hardware design techniques with Christmas lights.
- Using Linux commands to implement software code for proper in-device functionality.
- Implemented light to music syncing methods and parameterization.
- Implemented brightness tools to user preference and friendliness.
- Strategic NPV solution design to result in higher revenue for Holiday shows.

Awards

New York City College of Technology — Aug. 2017
National Honors Society of Leadership & Success

Certifications

Google Cloud Fundamentals: Core Infrastructure License: E9DHKTCCD2H2

Activities

Robotics Technology

- Geometric configurations and classifications of robots.
- Drive components (Electric, Hydraulic, Pneumatic).
- Computer controls and interfacing sensors.
- Data acquisition/handling and conversion.

Triathlon Hackathon

- Joining in on various developers to make IOT devices and to demonstrate the basic techniques of using a microprocessor or micro controller platform for IOT applications.