Jayant Tiwari

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PREVIOUS EMPLOYER

UNIVERSITY OF WATERLOO
JUNIOR TECHNICAL SUPPORT SPECIALIST
JAN 2015 - MAY 2015

- Planned and executed tasks centralized on troubleshooting, and maintenance of University Network
- Supervised the stability of Cisco Access-Points in newly built residences
- Client interactions and side-projects were prominent in this position:

PYTHON: SQLITE TO MYSQL

- Utilized Python for data migration from SQLite to MySQL as an extra-project for workplace
- Process was automated to eliminate manual data-entry
- Took the initiative to introduce version control system to work environment and placed projects on GITHUB

UBUNTU 14.04 SERVER

- Installed Linux based operating system on Server
- Server functioned as data backup and MySQL db
- Installed SSH port forwarding for remote access on private network

MEMOFIX DATA RECOVERY
COMPUTER TECHNICIAN
JULY 2014 - SEPTEMBER 2014

- Supplied required electronic parts from inventory to technician
- Applied troubleshooting techniques to rid Client Machine of any hardware or software issues

VISUAL BASIC INVENTORY TRACKER

- Designed user-interface in Visual Basic to increase efficiency when scanning items
- Implemented manufacturer's Visual Basic library for serial communication
- Data for inventory of tools was stored in local MySQL db

SKILLS

PROGRAMMING

- Java • C # • Python 2.7 • C++
- SQL • MYSQL • SQLITE
- HTML • CSS • Javascript
- VB6 • LaTeX

IDE

- Visual Studio
- Android Studio
- Eclipse
- Netbeans
- Altera Quartus
- Overleaf
- Arduino IDE

FRAMEWORK

- Django
- Android SDK
- .NET
- Familiar with J2EE

TECHNICAL SKILLS

- Development in Linux
- System automation using Python
- Experienced in OOP programming
- Certified computer technician
- Working experience with Excel, Access, Visio
- Excellent computer literacy
- Good understanding of back-end, network-topologies
- GUI design in VB and C#
- Technical documentation in Latex

PERSONAL PROJECTS

SQLITE AND MYSQL DATA FLOW IN PYTHON
Automated data transfer to mysql

- Utilized libraries for SQLite and MySQLdb in Python
- Data-migration was automated on the backup server

ANDROID QUADCOPTER
Bluetooth controlled quadcopter

- Designed frame for quadcopter in OPENSCAD
- Implemented lift-algorithm to design flight-controller
- Gyroscope reading from Android phone controls orientation of vehicle

C # SERIAL INTERFACE
Utilized serial port functionality in C#

- Interfaced open-source hardware with application through serial-port
- Created basic track-bar to control orientation of servo-motor and other actuators

ANDROID PEDOMETER
Calculate steps taken and displacement

- Calculate steps using low-pass filter from accelerometer readings
- Using the steps, calculated overall displacement by integrating direction vector

PYTHON ARCHEMEDIAL PYRAMID
Generate CAD coordinates for Archemedial Pyramid

- Derived and applied recursive relation for CAD modeling
- Generate desired output based on parameters giver (# vertex, vertical spacing)
- Project placed on GITHUB

EXTRACURRICULAR

UWARG-AERIAL ROBOTIC
Hardware design team

- Fabricated hardware schematics for quadcopter
- Established dynamic connectivity using XBee between multiple quadcopters

KUWARTZ MAKERSPACE
Design Exhibition

- Showcased Archimedial-Pyramid at Art-Exhibition in Kitchener
- Created Tordial-Helix Python script for CAD modeling

EDUCATION

UNIVERSITY OF WATERLOO

- B.ASc in Electrical Engineering

COMPTIA A+

- Certified Computer technician

CISCO

- Currently pursuing CCNA

EMBEDDED SYSTEM DESIGN

- Familiar with software development methodologies
- Exposure to industry standard data-structure
- UML diagrams, data-pipes, Feedback loop design, iterative design, etc.

DIGITAL CIRCUIT

- Designed and optimize circuits implementing Digital logic
- Program FPGA in VHDL

TRANSFERABLE SKILLS

TEAM PLAYER

- Active member, contributing to aerial robotic team

MEET DEADLINES

- Excellent time management skills allow for management of multiple projects prior to deadlines

WORK INDEPENDENTLY

- Focused, require little to no supervision

SELF-MOTIVATED

- Demonstrated ability to take on challenges and complete them