Kush Patel

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EDUCATION

University of Illinois Urbana-Champaign, Urbana, IL

Bachelor of Science in Computer Engineering

August 2016 - May 2020

RELEVANT COURSEWORK

- Computer Systems Engineering
- Artificial Intelligence
- Data Structures in C++

- Data Analytics and Algorithms in R
- Logical Synthesis
- Probability with Engineering Applications

SKILLS

Software: MS Office, Git, SVN, FL Studio, Adobe Premiere, Adobe Photoshop

Operating Systems: Windows XP/7/10, Mac, Linux, QNX

Programming: C, C++, Python, R, Assembly (x86), Django, HTML, CSS

Database: SQL Server, PostgreSQL, mySQL

Other: Agile Methodologies

WORK EXPERIENCE

Zebra Technologies, Lincolnshire, IL

May 2018 - August 2018

Engineering Internship, Firmware Development

- Utilized C++ to integrate photosensors as a more accurate media status alert system on Zebra Printers
- Developed an algorithm to determine threshold for printer's new media status alert system
- Developed an analytical framework to measure and collect printer metadata using C++
- Created database framework in SQLite on the Printer Firmware to locally collect printer data

University of Illinois Urbana-Champaign, Urbana, IL

August 2018 – December 2018

Operational Manager, Technology Services

- Managed one of the university computer networks that consists of over 100 computers across 6 labs
- Led a team of 60 employees through technical training and lab procedures
- Optimized ticketing system by automating an alert system to notify relevant person in charge
- Printer Troubleshooting, Network Management, Database Maintenance

Zebra Technologies, Lincolnshire, IL

May 2017 - August 2017

Engineering Internship, Advanced Development

- Improved print quality testing automation through Python and Shell scripting
- Worked on printer early warning detection notification system in C++
- Collected environmental printer data using various sensors, Python scripting, and PostgreSQL databases
- Designed a data analytics dashboard using Django, HTML, and CSS to display data stored in an AWS Database

University of Illinois Urbana-Champaign, Urbana, IL

November 2016 - August 2018

Computer Lab Technician, Technology Services

- Support faculty, staff, students and retirees to troubleshoot and repair computer problems
- Operating System, Software installation, Networking Configuration
- Enforce the ICS Lab Policies and promote a proper learning environment

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Customer Support Technician, Point of Sale Division

- Responsible for installing, configuring and troubleshooting Point of Sale related software and hardware.
- Provide on-site customer training for system functionality and debugging techniques.
- Enhance operation manual and troubleshooting guide which helped improve customer satisfaction.

Kumon Math and Reading Center, Bloomingdale, IL

May 2015 - April 2016

Head Tutor of Math

- Distributed and grade homework assignments as well as taught students mathematical concepts
- Developed a method to improve the accuracy of grading and returned papers to students.

RELEVANT PROJECTS

- **ByteOS:** Developed a Linux based Kernel from scratch which utilized Paging, System Calls, Scheduling, File Systems, Device Drivers, and Multiple Terminals.
- Missile Control Arcade Game: Made text based replica of the Missile Control game using Assembly (x86).
- **Custom Wristband Printer:** Worked with the team at Project Syncere to develop a python script that allowed kids of all ages to print their own custom wristband and ID by scanning a provided barcode.
- **Stack Calculator:** Created a basic calculator in assembly which used Reverse Polish Notation to compute math problems. Able to do addition, subtraction, multiplication, division, and exponent function.
- Vending Machine: Created the circuitry for a basic coin-operated vending machine