**Kush Patel**

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**EDUCATION**

**University of Illinois Urbana-Champaign,** Urbana, IL **August 2016 - May 2020**

Bachelor of Science in Computer Engineering

**RELEVANT COURSEWORK**

* Computer Systems Engineering
* Artificial Intelligence
* Data Structures in C++
* Data Analytics and Algorithms in R
* Algorithms and Models of Computation
* 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, Ruby, R, Assembly (x86), Django, HTML, CSS

**Database:** SQL Server, PostgreSQL, SQLite

**Other:** Agile Methodologies

**WORK EXPERIENCE**

**LendingHome,** San Francisco, CA **May 2018 – August 2018**

Engineering Internship, Software Engineering Intern

* TBA

**State Farm,** Urbana, IL **January 2018 – May 2018**

Engineering Internship, Data Engineering Intern

* TBA

**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

**JD Electronics Inc,** Roselle, IL **January 2016 – August 2016**

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