

# Kush Patel

6N381 Acacia Lane, Medinah, IL 60157  
(630) 523-2190 | [kushjp2@illinois.edu](mailto:kushjp2@illinois.edu)

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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
- 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  
Engineering Internship, Software Engineering Intern  

- TBA

**May 2018 – August 2018**

**State Farm**, Urbana, IL  
Engineering Internship, Data Engineering Intern  

- TBA

**January 2018 – May 2018**

**Zebra Technologies**, Lincolnshire, IL  
Engineering Internship, Firmware Development

**May 2018 – August 2018**

- 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  
Operational Manager, Technology Services

**August 2018 – December 2018**

- 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  
Engineering Internship, Advanced Development

**May 2017 – August 2017**

- 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