Siddhant Khera

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EDUCATION

University at Buffalo
The State University of New York

B.Sc Electrical Engineering
Minor in Mathematics
Graduated June 2020
Major: GPA: 3.83 / 4.00
Minor GPA: 3.60 / 4.00

Honors
Dean's List (2017, 2019)
Cum Laude (2020)
Final Year GPA: 4.0/4.0

CERTIFICATIONS

Engineering Intern (EIT):
Expected August 2021

SKILLS

Electrical
Circuit Development | Energy Systems | PCB Design

Programming
C | LaTeX| Python | MATLAB | HDL | SQL

Drafting Programs
Xilinx Vivado | NI MultiSIM | LTSpice | Power World | EasyEDA

Data
Data Guru | Microsoft Excel | Tableau | Supply Chain Guru

OTHER PROJECTS

- Frogger Game in C
- Optimizing Production Flows for Maximum Output Efficiency
- Market vs Baseline Transportation Cost Data Visualization in Tableau to Minimize Costs
- LED Matrix Graduation Cap
- Indoor Weather Station Integration with IoT Platforms

LINKS

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EXPERIENCE

ACCULOGIC | Electrical Application Engineer

Dec 2020 – Present | Toronto, ON

Acculogic manufactures flying probe testers with joystick like functionality & provides Test Engineering solutions to customers to minimize electrical failures on PCBAs & battery arrays.

- Support presales by working directly with end-users to understand requirements and integrate custom solutions.
- Lead product implementation and ensure a smooth handoff to customers.
- Provide insightful customer feedback to product management & development teams for product upgrades and new feature requests.
- Develop test applications for testing dense PCBAs with over 500 components to deliver field-ready boards to customers.
- Triage and provide support for flying prober machines worth $1M+.
- Understand, evaluate and develop complex benchmark projects to demonstrate testing potential to aerospace & defense customers.

RICH PRODUCTS | Network Design Intern

Jan 2020 - May 2020 | Buffalo, NY

- Utilized Linear Programming optimization to maximize production and minimize costs in the US/Canada Supply Chain Network of over 25,000 SKUs using Supply Chain Guru X.
- Proactively enhanced production flows to recommend savings of over $50K by using ETL tools and Tableau to present findings to the stakeholders.
- Blended data & visualized comparison of transportation costs across 4 providers in Tableau, proposed savings of over $100K in the network.

UNIVERSITY AT BUFFALO | Engineering Innovation Intern

May 2019 – Jan 2020 | Buffalo, NY

- Designed and created an integration in Python for Crestron Fusion DMPS-300-C, Alexa, & RFID tags using a Raspberry Pi and Amazon Web Services (AWS) to deliver a personalized media room experience.
- Architected a scalable hardware/software integration back-end.
- Configured Amazon Lex & IBM Watson to control the media rooms via chat.
- Researched cases for developing university-scale applications for applying Artificial Intelligence/Machine Learning tech in future services and projects.
- Actively used Agile methodology to complete the project within 6 months.

PROJECTS

xylem SOLAR ENERGY HARVESTER FOR A WATER METER

Senior Design Project, Company Sponsored

- Developed a custom solution using solar power to harvest energy and provide up to 30 days battery storage at 5mW peak output to the load.
- Designed a custom PCB that resulted in a 73% smaller enclosure and $500K savings for 5M units, while exceeding most original requirements set by the company by at least 100%.

PRELIMINARY DESIGN FOR ADDING A 200MW WIND FARM

- Added a 200MW Wind Farm (theoretically) to an existing system by choosing appropriate Conductor Types, Tower Designs and Right-of-Ways and reduced existing system losses by 10%, resulting in hypothetical savings of $650K of maintaining the grid.