

Aasim Ahmed Patel

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EDUCATION

University of Texas at Dallas – Richardson, Texas

Expected graduation: August 2024

Bachelor of Sciences in Computer and Electrical Engineering

Relevant coursework: Fundamentals of Electrical and Computer Engineering II, Electrical Network Analysis, Discrete Time Signals and Systems, Data Structures and Algorithms, Electronic Devices, Electronic Circuits, Embedded Systems, Machine Learning, Artificial Intelligence

SKILLS

Programming Languages/Skills: C++, Java, C, Verilog, Python, MIPS, Machine Learning, Figma, Linux, Tensorflow

Hardware: BJTs, Transformers, ADCs & DACs, Op Amps, VPS, Oscilloscopes, Motors, Soldering, Network Analyzers, Signal Generators, Voltmeters, Microcontrollers (ESP32-C3, ESP32-WROOM, Arduino Uno R4)

Certifications: 5G Primer Qualcomm, IBM - Working in a Digital World: Professional Skills, Coursera: Manage your versions with Git

Languages: English, Urdu, Spanish, Arabic

PROJECTS

Senior Design Project - Stress Testing Switch, Juniper Networks and UTDallas

January 2024 - August 2024

- Was a part of a senior design project to stress test an EX4500 switch from Juniper Networks, identifying power overload thresholds and brownout occurrences.
- Developed a Python script interfacing with Junos OS and Linux kernel, automating diagnostic analysis through CLI commands.
- Integrated a Raspberry Pi for seamless communication with the switch, facilitating efficient testing and problem detection.

Hackathon Toyota Application, UTDallas

November 2023

- Was a part of a hackathon team to develop an EV app predicting optimal charging schedules for 90 days, enhancing user planning and efficiency.
- Implemented Python-based machine learning models to analyze 20-day historical data, accurately forecasting EV battery charge needs and usage for the next day.
- Presented project outcomes to Toyota representatives, showcasing coding proficiency and positive user impact.

PROFESSIONAL EXPERIENCE

MngoTech, Blockchain Research Engineer Intern – Dallas, Texas

December 2021 – February 2022

- Developed an information database on blockchain, achieving improved data security by implementing advanced encryption techniques, utilizing cutting-edge blockchain technology.
- Spearheaded the backend development for cryptocurrency language creation, resulting in enhanced system functionality by optimizing code efficiency, utilizing industry best practices.
- Executed comprehensive testing procedures by implementing rigorous quality assurance protocols, ensuring seamless integration of blockchain components.

Varsity Tutors, Online Math Tutor – Dallas, Texas

August 2023 – November 2023

- Guided students in Pre-calculus, Algebra, Geometry, and Calculus One, achieving improved comprehension by implementing personalized teaching methodologies, tailoring lesson plans to individual learning styles.

Mint Motorcycles, Motorcycle Maintenance Technician – Irving, Texas

March 2020 – April 2020

- Executed proficient maintenance and repair services on motorcycles, ensuring optimal performance by implementing diagnostic tools and employing industry-standard repair techniques.
- Collaborated with the team to optimize workshop productivity by coordinating tasks effectively and prioritizing repairs based on urgency and customer needs.

LEADERSHIP ACTIVITIES

The Braven Accelerator, Fellow – Dallas, Texas

September 2023 – December 2023

- Developed workforce skills such as leadership, operating and managing, communicating and networking, working in teams, and problem solving by completing a 14-week leadership and professional development course.