ANANYA DAS

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EDUCATION

Texas A&M University | College Station, TX — December 2026
B.S. Mechatronics Engineering | Minors: Embedded Systems
The British School of Kuwait | Kuwait — June 2022
A Level: Mathematics, Physics, Computer Science, Chemistry (AS Level)

SKILLS & COURSES

Programming tools: Python, C++, Java, C, SQL, JavaScript, HTML, React, Swagger, JSON, YAML, MATLAB, SimuLink, Linux.
Technical skills: Full-stack development, ChampSim for chip simulation, multi-core system optimization and testing, RFID, Bluetooth, and MAC address tracking integration, circuit analysis and digital electronics, MS Visio, Bizagi Modeler, SolidWorks, AutoCAD, FPGA implementation
Relevant courses: Circuit Analysis, Mechanics, Digital Electronics, Embedded Systems Development in C, Applied Dynamic Systems, Thermodynamics, Engineering Calculus I & II

RELEVANT EXPERIENCE

Texas A&M Transportation Institute | Bryan, TX — May 2024 - present

Hardware Engineer
- Developed hardware communication systems for solar cell operations using Linux-based computers and virtual machines, ensuring reliable and efficient data transfer.
- Implemented and managed signal transmission protocols with PyModbus to interface with solar cells, achieving accurate control and data retrieval.
- Collected and analyzed historical performance data from solar cells deployed at the Mexico border, contributing to system optimization and maintenance planning.
- Configured and maintained Linux environments and virtual machine setups to support scalable and robust hardware-software integration.
- Conducted troubleshooting and debugging of hardware-software interfaces to ensure uninterrupted solar cell operation and data integrity.

Full Stack Engineering Intern
- Designed and deployed a full-stack border optimization platform, developing frontend components (HTML, JavaScript, React) and backend/API systems (Python, SQL) for seamless integration.
- Integrated advanced technologies such as RFID, Bluetooth, and MAC address tracking to enable enhanced data acquisition and system intelligence.
- Architected robust database structures, drafted detailed technical proposals, and managed project budgets, ensuring compliance with client requirements and objectives.
- Delivered a comprehensive solution for the Texas Department of Transportation (TxDOT), demonstrating proficiency in system design and collaborative project execution.
- Utilized a versatile technology stack including Swagger for API documentation, JSON for data interchange, and YAML for configuration management to optimize system functionality and performance.

Protiviti | Kuwait — May 2021 - August 2021

Data & Digital Intern
- Experienced in developing presentations and actively contributing to the creation of essential documents such as Business Requirements Documents (BRD) and Solution Design Documents (SDD).
- Proficiently employed MS Visio and Bizagi Modeler to design streamlined process flows. Skilled in conveying complex information effectively and demonstrating meticulous attention to detail.

LEADERSHIP EXPERIENCE

PHI SIGMA RHO | Vice President of Membership| *Executive Board* — May 2024 - May 2025
- Oversaw membership processes, new member education, and ritual traditions.
- Managed the chapter membership roster and updated member statuses in ChapterSpot.
- Maintained the sorority's image and upheld traditions while liaising with the National Sorority for induction and initiation materials.
- Supervised directors for Ritual, Membership Education, Retreats, and Sigmand Sister activities, ensuring seamless operations and reporting

KANM STUDENT RADIO | Chief Engineer | *Executive Board* — December 2023 - May 2025
- Organize and support Live Sessions and live broadcasting events
- Maintain, install, and update station equipment
- Oversee Assistant Engineer and Engineering Staff Team

AWARDS & CERTIFICATIONS

· Duke of Edinburgh Award (Bronze, Silver) · BSK Leadership Award (2022) · BSK Subject Award for Computer Science (2022)