GITHIN JOHNY

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EDUCATION

Texas A&M University **College Station, TX**
B.S. Computer Engineering, Minor in Mathematics *May 2026*
- **GPA:** 3.7
- **Relevant Courses:** Program Design & Concepts (C++), Data Structures & Algorithms (C++), Computer Systems (Linux/C), Computer Architecture (ASM), Engineering Computation (Python)

El Paso Community College **El Paso, TX**
A.A. Multi-disciplinary Studies *May 2022*
- **GPA:** 4.0
- Dual-credit classes during high school

EXPERIENCE

Methix by AJAM - Software Engineering Intern **Remote**
Backend and Cloud Infrastructure *January 2025 – Present*
- Developed backend logic using Python, prioritizing scalability to ensure seamless deployment across web and mobile apps
- Integrated OpenAI API and Azure Cognitive Services with Azure Functions for security and workflow organization
- Connected backend with Cosmos DB for data management and Azure Blob Storage for efficient handling of large-scale data

Texas A&M University Technology Services **College Station, TX**
IT Student Technician *January 2024 – Present*
- Navigated a system of 60+ software/hardware embedded systems to resolve issues by isolating and diagnosing requests
- Facilitated IT initiatives for a network of 2,500+ users: imaging, deploying, maintaining, and transporting tech assets
- Ensured rigorous security compliance and network maintenance through adept maintenance within active directory

PROJECTS

SOMTECH - IGNITORS Rocket Team | *ESP32, Arduino, C++* **December 2024**
- Configured ESP32 board to integrate a system of 5+ components including GPS, pressure sensors, and live camera feed
- Developed micro-python code to relay and display live telemetry data on real-time graphs
- Ensured rocket functionality, backup avionic,s and payload systems through repetitive testing procedures and iterations

Food/Calorie Intake Tracker | *Python, MySQL, Flask, HTML/CSS, Java, PostgreSQL* **July 2024**
- Developed full stack web application utilizing a 4 category cloud database using serverless PostgreSQL to monitor nutrition
- Designed a responsive, user-friendly frontend using Flask and HTML/CSS, ensuring a seamless user experience
- Engineered efficient backend with MySQL, Python, Java to manage 20+ sensitive records, including user accounts and logs

Automated Coffee Machine – Hackathon | *Raspberry Pi, Python, IoT, Embedded Systems, Arduino* **September 2024**
- Developed an IoT-enabled coffee system with efficient breadboard wiring from Raspberry Pi Pico W to peripheral sensors
- Created customized Python script to interface with PIR motion sensors, HC-SR04 ultrasonic sensors, and microservo motors
- Leveraged a system of 4 microcontroller peripherals to automate coffee machine operations based on real-time sensor data

Image Seam Carving | *C++* **March 2023**
- Implemented seam carving algorithm to preserve essential image content through data analysis of pixel/RGB energy values
- Achieved over 90% accuracy in preserving quality visual details during scaling, with minimal content loss or distortion
- Developed an energy map to identify low-energy seams and enhance RGB values that ensured a 30% increase in precision of calculated pixels for content-aware scaling

LEADERSHIP & ACTIVITIES

Institute of Electrical and Electronics Engineers – Texas A&M Chapter (IEEE) *August 2024 –Present*
- Active member of IEEE collaborating on technical projects and events.
- Engaged in mentor/mentee program that fosters collaborative growth from peers of different career stages

NASA Texas High School Aerospace Scholar *January 2021 – June 2021*
- Completed NASA-led program, showcasing self-motivation and expanding knowledge in STEM-related topics
- Designed and implemented engineering strategies for landing Lunar exploration modules relating to the Artemis program

Texas A&M Computing Society *March 2022 – Present*
- Engaged in industry talks, software workshops, and networking events, enhancing knowledge and skills
- Built valuable connections while exploring future opportunities in the dynamic fields of technology

SKILLS

Skills: C++, Python, MySQL, PostgreSQL, HTML/CSS, JavaScript, Node.js, Verilog, Linux, Rpi4, API, Arduino
Developer Tools/Frameworks: VS Code, Flask, Microsoft Office Suite, Git, ServiceNow, Active Directory, IT
Certificates: Red Hat Linux System Administration I