

David Denny
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Phone: +1 (682)-401-2358

Location: Arlington, TX

Education:

- **University of Texas at Arlington | 3.714 GPA** Arlington, TX
Bachelor of Science in Computer Engineering August 2023 - December 2025
 - **University of Alabama in Huntsville | 3.85 GPA** Huntsville, AL
Bachelor of Science in Computer Engineering August 2021 - May 2023
 - **James Martin High School | 4.00 GPA, Top 10% of Graduating Class** Arlington, TX
STEM-oriented Schooling August 2016 - May 2021
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Skills:

- **Experienced (5 Years)** with the Microsoft Office, Google Drive, and Adobe Creative Suites
 - **Competent (3-4 Years)** with MobaXterm and the C, C++, SystemVerilog, and MATLAB Programming Languages
 - **Familiar (2 Years)** with CCS, Java, Python, HTML5, Vivado, Git, Bitbucket, and CADs Solidworks and Fusion360
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Projects:

- **Simple Surveillance Robot | Embedded Systems:** Designed and built a surveillance robot using the Texas Instruments TM4C123GXL (Tiva C) and CCS. Soldering together a circuit to implement two-wheel motor control, movement automation, and distance/motion sensing using UART, PWM, motor drivers, and onboard sensors. Strengthened understanding of embedded system architecture, peripheral interfacing, and hardware integration.
 - **Various Programming Projects | Programming Experience:**
 - **Unix Shell:** Created a simple Unix Shell using C. Allows users to interact and run commands with a command line with a proper understanding of program creation and management.
 - **Custom xv6 System Calls:** Using the xv6 Operating System as a foundation, altered and created multiple kernel-level system calls and test applications to better understand these systems.
 - **Portfolio Website:** Created a website to better understand HTML and web design. The website serves as a portfolio, detailing my experience, projects, and online presence in greater detail. Link listed above.
 - **RISC V Processor From Scratch:** Using an Xilinx Blackboard FPGA, created a RISC V Processor from scratch, implementing a five stage pipeline following AMD's RV32i base instruction set.
 - **RTOS From Scratch | OS Programming Experience:** Developed a microcontroller-based Real-Time Operating System supporting multithreading, context switching, kernel/user separation, and UART-based interaction.
 - **Encapsulated Gardening Grounds | Senior Design / Capstone Project:** Led hardware development for a self-contained, IoT-enabled gardening system, following Scrum project management. Using an Arduino R4 UNO WiFi, multiple sensors, fans, and a pump, created an embedded system that parses and logs data concerning temperature, humidity, moisture levels, etc. Hosted a local HTML website using the microcontroller to interface with a desktop application that facilitated automatic task scheduling for irrigation and humidity control, and monitoring of crop health. Modeled an enclosure to satisfy all product requirements under budgetary constraints.
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Jobs and Experience:

- **IoT and Solutions Engineer at Appticity Corporation** Irving, TX
IoT Intern and R&D Engineer May 2025 - May 2026
 - Supported IoT device lifecycle operations including interfacing, diagnostics, repair, and inventory management of proprietary hardware. Performed on-site repair and redeployment of deployed IoT systems. Participated in code reviews and cross-functional development meetings supporting both existing and next-generation devices. Applied mechanical design skills to develop 3D-printed components meeting project-specific requirements. Assisted in sourcing hardware components, significantly reducing project costs. Contributed to large-scale system deployments in collaboration with external partners.
 - **Retail Work at Daylight Donuts and Chick-fil-a Inc.** Huntsville, AL and Arlington, TX
Retail Employee | Multiple Roles May 2022 - May 2025
 - Established essential workplace skills in a fast-paced work environment. Utilized essential collaboration skills.
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Honors, Awards, and Certifications:

- **UAH President's List and Dean's List | Recurring Recipient** August 2021 - May 2023
- **UAH and UTA Merit-Based Scholarships | Recurring Recipient** August 2021 - January 2025
- **College Board AP Scholar | Recipient** August 2021
- **UTA Embedded Systems Certification | Recipient** December 2025