David Denny

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Website: davidisdennyus.com **Phone:** +1 (682)-401-2358 **Location:** Arlington, TX **Education:** Bachelor of Science in Computer Engineering Expected Graduation: December 2025 University of Alabama in Huntsville | 3.85 GPA Huntsville, AL James Martin High School | 4.00 GPA, Top 10% of Graduating Class Arlington, TX **Skills:** Experienced (3+ Years) with the Microsoft Office, Google Drive, and Adobe Creative Suites Competent (2 Years) with the C, C++, SystemVerilog, and MATLAB Programming Languages Familiar (1 Year) with CCS, Java, Python, HTML5, and simple CAD software such as SketchUp **Projects: Simple Surveillance Robot | Embedded Systems:** Created a simple surveillance robot from scratch, implementing and becoming acquainted with the various concepts of Embedded Systems. The robot travels and rotates with two wheels, driven by motors and implemented primarily using Texas Instruments' TM4C123GXL Red Board and the CCS suite. The robot can perform various movements and automations at specified distances, and sense movement and distance using PIR, IR, and Ultrasonic Sensors. This project served to better understand the process of creating an embedded systems product, with concepts such as UARTs, PWMs, DRVs, and Soldering. **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.

- o 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.
- **Java Minesweeper:** Created the game *Minesweeper* from scratch using Java in order to better understand and learn the language.
- **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.

Jobs and Experience:

- Retail Work at Daylight Donuts and Chick-fil-a Inc. Huntsville, AL and Arlington, TX
 - Established essential workplace skills in a fast-paced work environment. Demonstrated flexibility and speaking skills in arduous, varied working hours in regards to customer service and team communication. Often contributed to multiple roles and responsibilities.
 - Demonstrated value towards these retail establishments, often accruing up to 5 times the revenue for the establishment compared to labor costs in a given time period.

Honors and Awards:

- **UAH and UTA Merit-Based Scholarships** | Recurring Recipient August 2021 January 2025