

ZACHARY AUSTIN FULMER

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San Antonio, TX 78256

Cell: 281-923-9322 **Email:** Zachfulmer@earthlink.net

Education: UNIVERSITY OF TEXAS AT SAN ANTONIO

San Antonio, TX

Bachelor of Science in Computer Engineering

GPA: 3.93

Clearance: Top Secret

Certifications: Full Stack Web Development

October 2022

Certified by: University of Texas at San Antonio

Comprehensive VHDL

July 2020

Certified by: Doulos

Work Experience:

CACI

March 2021 – Current

T2 Engineer

Assisted with software development and system integration for compact range antenna testing for the characterization of F-16 Radomes (MATLAB/C)

Updated Test Program Set software and provided electrical design input to address obsolescence for Angle of Attack Transmitters for the E-3, F-15, F-16 and KC-135 aircrafts (LabVIEW)

Assisted with the design and development of a power supply test stand as well as wrote a software routine to verify the functionality of various lab instruments within the tester (TestStand)

Southwest Research Institute

September 2019 – November 2020

Engineer

Served as the lead Engineer in the redesign/modernization of a 4 PWB sub-assembly that handled weapon releases for the A-10C

Delegated tasks to a team of 3 Engineers which included hardware design, schematic generation, firmware design, and firmware simulations (VHDL)

Dynetics

February 2019 – August 2019

Weapon System Analyst- Hardware and Embedded Firmware Engineer

Used reverse engineering principles to characterize unknown hardware and develop schematics

Generated firmware/software solutions to control a pedestal mount via joystick commands

Gained experience in reverse engineering, debugging and firmware design

University of Texas at San Antonio

August 2018 – December 2018

Teaching Assistant (Undergrad)

Taught principles in Digital System Design and administered lab sessions (Verilog)

Helped students program Nexys 4 DDR boards to further demonstrate RAM, State machines, Etc.

Academic Projects:

Radial Firearm Disabling System (C)

- Helped design and develop a firearm locking system using radio frequency
- Used Fusion360 software to design attachment casings for housing components
- Used Autodesk Eagle to design custom printed circuit boards

Autonomous Robot Delivery System (Java)

- Utilized Fusion360 CAD software to design a chassis with a holonomic drive train

- Used OpenCV and image processing techniques to detect specific targets
- Constructed a robot to autonomously navigate to specific gates to drop off color coded payloads

Skills & Abilities:

Strengths

- Communication, self-motivated, adaptive, team player and open minded

Software

- Cadence Encounter, Code Composer Studio, Autodesk Fusion 360 and Eagle
- LabVIEW, Microsoft Visio, Mentor Graphics, Microsoft Excel, LabVIEW
- Vivado, Microsoft Word, Microsoft PowerPoint and Mentor Graphics DX Designer
- LabWindows CVI, MATLAB, Git, GitHub, Visual Studio Code

Coding Languages

- Verilog, VHDL, TestStand
- LabVIEW, C, JavaScript, HTML, CSS