MATTHEW G. SIZEMORE

Kathleen, GA 31047   GratefulGabe5000@gmail.com

OBJECTIVE

Develop next level Artifical Intelligence with modern technology leaders and enhance the state of the art. Transform my engineering breadth-of-scale exponentially by working to integrate AI solutions into systems management. Explore AI powered hardware solutions in compact form factors for general populace use. Explore integration of AI into factory design. Maximize productivity by sculpting cohesive teams and empowering and mentoring them.

PROFESSIONAL EXPERIENCE

Internal Research and Development   *Chemring Energetic Devices - Aug 2023 to May 2024*

Lead/Program Engineer. Device Architect. FW Programmer. Develops SafeAssure, a novel UAS (drone/missile) integrated fuze and safety device. Programs firmware in VHDL and directs design and layout of electronic device. Develops project foundation and trajectory from concept toward mass production, including test procedures, HITL test apparatuses, and industry show demonstration rigs. Provides Liaison and Business Development with Department of Defense and industry customers.

Warner Robins Defense Engineering   *KBRwyle - Mar 2020 to Nov 2022*

Chief Engineer. Principal Systems Engineer. Program Engineer/Manager. Directs and provides oversight over all engineering efforts and personnel. Crafts and leads cross-functional integrated teams to product development and strategy successes. Defines business goals and technical KPIs, and tracks, analyzes, and communicates metrics to inter-departmental leadership. Ensures program management and configuration management principles are exercised to achieve on-budget, on-schedule production of software, firmware, and hardware products. Final review & approval for all engineering drawings, code, and documentation. Provides Liaison and Business Development with Department of Defense engineering customers. Resolves DMSMS issues with Form, Fit, Function, and Interface compatible replacement designs. Reverse engineers legacy devices and requirements, redesigns documentation, forms technical relationships with manufacturers, qualifies sources, builds prototypes, test fixtures, and plans, performs tests, and guides designs toward streamlined manufacturing contracts IAW Defense Acquisition Guidebook System Engineering protocol and government customer input.

RFCM Active Expendables   *Sumaria Systems - Feb 2018 to Feb 2020*

Senior Electrical Engineer. Lead Systems Engineer. The Radio Frequency Countermeasures (RFCM) Active Expendables team supports electronic warfare countermeasures for USAF and Joint aircraft. Provided technical oversight and subject matter expertise. End to end contract development (Statements of Work, Technical Evaluations, technical aspects of execution). Generated 3D Model Based Technical Data (Digital Twin) and complete TCTO package for ALE-50(V)1 Fault Isolation System Tester (FIST).

C2ISR Division   *Credence Management Systems - Jan 2016 to Feb 2018*

Lead Systems Engineer. Lead Configuration/Data Manager. Lead Risk Manager. AFLCMC's Command & Control, Intelligence, Surveillance and Reconnaissance (C2ISR) Division collects, processes, and disseminates intelligence for national security. Conducted AF Systems Engineering Assessment Model division assessment and ongoing process evaluation and improvement. Ensured division compliance with configuration management and risk management guidance. Shaped custom implementation of Lean / Agile methods in Automated Logistics Management Supply System (ALMSS).

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AN/ALQ-221 Electronic Warfare Suite

Senior Electrical Engineer. Lead Systems Engineer. The AN/ALQ-221 provides threat detection and countermeasures to defend U-2 aircraft. Developed technical requirements, strategies, and solutions. Managed integrated master plan, schedule, and risk management plan for system updates. Oversaw milestone test and evaluation per DoDI 5000.02. End to end contract development (Statements of Work, Technical Evaluations, technical aspects of execution). Provided liaison and central leadership for geographically diverse team.

AN/ASQ-230 Intelligence Sensor

Senior Electrical Engineer. Systems Engineer. The AN/ASQ-230 intelligence sensor provides essential reconnaissance data to the intelligence community. Coordinated testing plan and schedule between system of systems components (airborne and Distributed Common Ground Station [DCGS] segments). Conducted top-to-bottom assessment and update of U-2 weapon system's Program Protection Plan.

AN/ALE-50 Towed Decoy   *Georgia Tech Research Institute – Aug 2013 to Dec 2015*
Research Engineer. Project Director & System/Electrical/Reliability Engineer.

Apple iOS Electronic Flightbag
Research Engineer. Software/Test Engineer.

Airfield Operations Executive   *United States Air Force – Oct 1999 to Oct 2009*

Air Traffic Controller

Communication, Navigation, & Mission Systems Integrated Avionics Craftsman

EDUCATION

- M.S. in Electrical Engineering, 2016   *Mercer University, GA*
     Minor in Software Engineering
     IEEE Autonomous Turretted Vehicle (OpenCV,RPi, Full-Stack)
- B.S. in Electrical/Electronics Engineering, 2014   *Mercer University, GA*
- B.S. in Air Traffic Control, 2009   *Thomas Edison State University, NJ*
- A.S. in Applied Airway Science, 2007   *Community College of the Air Force, AL*
- A.S. in Avionic Systems Technology, 2006   *Community College of the Air Force, AL*

ADDITIONAL SKILLS & INFO

- System: Department of Defense Acquisition University, Lean/Agile Project Management, Waterfall Project Management, Configuration Management, Microsoft Project, Jira, GIT
- Hardware: Robotics, Controls, Signal Processing, Analog/Digital Circuit Design, PCB Layout, FPGA Design, Hardware-In-the-Loop Testing, Multisim LabView
- Software: VDHL, Java, C++, Objective-C, Python, Static and Dynamic White-Box Testing, Artificial Intelligence (AI) & Machine Learning (ML), Ux, Front-End, Full-Stack
- Computer: MS Office, MATLAB, MultiSim, LabView, Solidworks, AutoCAD, Weibull++, Eagle, Unity Engine, Unreal Engine, Blender, Android, iOS, Linux
- Top Secret Security Clearance, SCI adjudicated 2017
- 10-point Veteran's Preference based on compensable service-connected disability of 100%