James A. Barnes
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OBJECTIVE

Dedicated and results driven electrical engineer with a track record of tackling complex challenges. Recognized for the ability to devise solutions to intricate problems, I bring a strong analytical mindset and a commitment to excellence as well as efficiency. Seeking a position where my drive for problem solving and technical skills can contribute to the success of my team.

PROFESSIONAL EXPERIENCE

Raytheon Technologies
Electrical Engineer II   -   Active DoD Secret Security Clearance

Factory Support and Test Engineer   *April 2021 – present*
- Lead Factory Engineer for two Engineering & Manufacturing Development programs: 3GEN BKIT and SEPv4 CPS/GPS.
- Developed mission critical Test Procedures for prototype systems, including formal documentation & script automation.
- Created MATLAB Scripts automating data processing for the investigation of a critical system failure.
- Troubleshoot assembly and test failures that arise in the factory and integrate long and short-term solutions.
- Perform Root Cause Analysis and Corrective Action for systemic failures identified in various assemblies.
- Maintain factory test equipment integrity, including managing and performing calibration for all Test Assets.
- Identified bottleneck in production and developed Python automation, increasing testing efficiency by 90%.

Test Equipment Development and Sustainment   *June 2020 – April 2021*
- Experienced in troubleshooting NI TestStand, LabVIEW, and various other NI Suite tools.
- Reverse engineer undocumented legacy Test Equipment for repair, maintenance, and upgrade.
- Assembled new test stations and managed equipment validation and release processes for factory use.
- Operate and Troubleshoot Windows NT, 95, 98, 2000, XP, 7, and 10 systems. Including classified & secured systems.

UT Dallas OIT Help Desk   *April 2018 – May 2020*
Student Supervisor
- Responsible for training employees on effective troubleshooting techniques and proper customer service etiquette.
- Conducted interviews and facilitated meetings/presentations for employees.

EDUCATION

University of Texas at Dallas
Bachelor of Science in Electrical Engineering   *Aug 2016 - May 2020*
- Senior Capstone: Developed a Sun Position Detector and Solar Panel Orienter

AWARDS and RECOGNITION

Raytheon Achievement Award
- Awarded by 3GEN B-Kit Program in recognition of comprehensive investigation and troubleshoot of critical unit failures, as well as implementing creative solutions and automating processes.

Phi Delta Theta
- Founding Father for the UTD Chapter. 4-year member of Executive Board: Vice President, Treasurer, & Warden.

Eagle Scout Award
- Awarded for planning and construction of clothing donation receptacles for 'Trusted World'.

ADDITIONAL INTERESTS

First Robotics Competition
- Software Mentor, Team 3310 - Rockwall-Heath High School

Project Cars
- Street Ported and Rebuilt 13B Rotary Engine. Removed engine from donor car, tore down, evaluated, and replaced all worn components. Working to retrofit 2nd generation suspension, subframe, and engine into a 1st generation chassis.
- Project Vehicles include: 1983 Mazda FB RX-7, 1988 Mazda FC RX-7, 1990 Mazda MX-5 "Miata"