Jesus Arias

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Personal Statement

As an aspiring young professional with a robust education in software and hardware engineering, I bring a developing background enriched by leadership roles in the Engineer Student Council and as a Design Team lead. My approach emphasizes continuous learning, active listening, and thoughtful reflection to support both my peers and personal growth. Currently, I am engaged in diverse projects including self-study in data structures and algorithms, crafting custom mechanical keyboards, and expanding my skills in automobile repair and mechanical engineering.

EDUCATION

The University of Arizona – W.A. Franke Honors College

B.S. - Electrical Engineering and Computer Engineering — May 2023

Minor - Mathematics — GPA: 3.53

PROFESSIONAL EXPERIENCE

Hardware Computer/Reliability Engineer — *Chandler, AZ*

Microchip Technology Inc. — *June 2023 – Present*

- Developed a Python automation script to parse and calculate MTBFIT data from quarterly Reliability Monitoring Reports: featuring directory file selection, precise data separation and requisition, streamlined JSON conversion for efficient storage, and automatic file creation timestamping.
- Proficient in planning and designing Printed Circuit Boards (PCBs) specialized for Failure Analysis Breakout Cards.
- Operated and managed advanced burn-in systems: ELES smART, ELES TTS1, ELES MTx, MCC-LC2, and AEHR Max2/Max3 ovens, enhancing operational performance.
- Researched and submitted 30+ Burn-In Spec product qualification reports, demonstrating meticulous attention to detail.
- Created an AEHR to MCC-LC2 burn-in program conversion using Python, improving workflow efficiency and cross-platform compatibility between burn-in systems.

Software Engineering Intern — *Tucson, AZ*

IBM Corporation — *May 2021 – May 2023*

- Assisted in development of a diagnostic health evaluation bash script deployed to over 4000 XIV/A9000/R flash storage systems to identify potential failing BBU power supplies.
- Implemented the bash script which upon completion negated the need for physical BBU power supply replacement for over 10,000 servers worldwide.
- Diagnosed technical issues and supported clients in resolving issues related to their the XIV/A9000/R flash storage system servers.

RELATED PROJECTS

Senior Design Project - Software and Hardware Design Team Lead — *Tucson, AZ*

University of Arizona & Microsoft Corporation — *August 2022 – May 2023*

- Prototyped and constructed a Two-Phase Immersion Cooling server for Microsoft using FC-72 Fluorinert.
- Designed and coded a Graphical User Interface in Python for system and sensor control.
- Coded and integrated a dynamically updating multi-axis graph in C++ and Python sensor inputted data
- Directed total system wiring, total system design, and construction.
- Received Best Design Popular Vote during Craig M. Berge Senior Capstone Design Day