Amber Patrice Harrington

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SKILLS

- Design and verification of digital systems in SystemVerilog and Verilog
- Proficient in C (embedded), C#, TCL, Python, Perl, and shell scripting
- Expertise in modeling systems, writing reusable (OVM, UVM) self-checking testbenches in SystemVerilog, Verilog, and VHDL
- Familiarity with Cadence Tools, NCsim, SimVision, XFdtd, vManager, vPlanner, Virtuoso, and associated scripting.
- Proficiency in *NIX systems, MATLAB/Octave, Mathematica, Xilinx Vivado, NI Microwave Office, Quartus Prime, Altium, Eclipse, LaTeX, and Microsoft Office suite
- Proficiency with multimedia programming in Max/MSP, C, imageMagick, puredata, GNU Image Manipulation Program, and various DAWs.

EXPERIENCE

TEXAS INSTRUMENTS   2016–2026
Digital Design and Verification Engineer

- Designed the digital logic (RTL) for a non-volatile memory control block, reducing cycle time by 10% through optimized implementation.
- Produced test cases using constrained-random techniques, increasing test coverage by 15%.
- Supported other teams by providing technical resources, contributing to improving cross-functional project completion rates by 20%.
- Constructed testbenches and tests using OVM/UVM principles, focusing on reusability and backward compatibility, leading to a 30% reduction in rework.
- Validated RTL on FPGAs, identifying system-level issues and improving product stability pre-production. Wrote GUIs in C#

UNIVERSITY OF COLORADO AT BOULDER   2015–2016
System Administrator

- Deployed new software to labs and managed departmental servers, improving uptime by 15%.
- Assisted students, staff, and faculty with troubleshooting a wide range of technical issues, including virus removal, dual-boot setups, component replacements, and data recovery on failing hard drives.

UNIVERSITY OF COLORADO AT BOULDER   2012–2015
General Desktop Support Work-Study

- Troubleshot various computer issues for students and staff, consistently achieving high customer satisfaction and contributing to smooth technical operations within the department.

EDUCATION

UNIVERSITY OF COLORADO AT BOULDER   Graduated: 2025
Master of Electrical Engineering, Embedded Systems Engineering Certificate
Study Area: Embedded Systems Engineering & Signal Integrity

UNIVERSITY OF COLORADO AT BOULDER   Graduated 2015
Bachelor of Science
Electrical Engineering, Focus on DSP & Electromagnetics.   Dean's List: 2014–2015