

# 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, L<sup>A</sup>T<sub>E</sub>X, and Microsoft Office suite

## WORK EXPERIENCE

*Digital Design and Verification Engineer* 02/2016–Present  
*Texas Instruments*

- 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#

*System Administrator* 11/2015–02/2016  
*Office of Information Technology, University of Colorado at Boulder*

- 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.

*General Desktop Support Work-Study* 07/2012–11/2015  
*University of Colorado at Boulder*

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

## EDUCATION

*Master of Electrical Engineering — Graduated: 2025*  
Study Area: Embedded Systems Engineering  
University of Colorado, Boulder, CO

*Bachelor of Science — Graduated 2015*  
Electrical Engineering, Focus on DSP and Electromagnetics. Dean's List: 2014–2015  
University of Colorado, Boulder, CO

## PROJECTS

### Digital Signal Processing Lab Project

Designed processing system that classified music genres from data Developed and tested

algorithms in MATLAB, later implemented on a DSP processor.