Amber Patrice Harrington

chipchirp.digital — amber.patrice.harrington@gmail.com — Longmont, CO —(303) 319 3430

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, vManager, vPlanner, Virtuoso, and associated scripting.
- Proficiency in *NIX systems, MATLAB/Octave, Mathematica, Xilinx Vivado, NI Microwave Office, Altium, Eclipse, LaTeX, 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 07/2012–11/2014
University of Colorado at Boulder

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

EDUCATION

Master of Engineering (part-time) — Expected Graduation: 2025
Study: Embedded Systems Engineering GPA: 3.925/4.0
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.