

Matt Francis

515 S. Duncan Ave.
Fayetteville, AR 72701
afranci@uark.edu

Skills and Abilities:

- ◆ Excellent leadership, organizational, and communication skills.
- ◆ Knowledgeable with computer hardware and operating systems (Linux, BSD, HP-UX, Solaris, Windows 2K, NT etc.) and programming languages (C, C++, Perl, Python, QT, Tcl/Tk), including programming tools (Make, CVS, etc.).
- ◆ CAD drafting experience (AutoCAD), EDA tool experience (Spice, Synopsis tools, Verilog HDL, Mentor Graphics, etc).

Education:

University of Arkansas, Fayetteville. Bachelors of Science in Electrical Engineering, Bachelors of Science in Physics, 130 hours completed with a GPA of 3.85.

Employment Experience:

- ◆ **May 2000-Present, Mixed Signal and Linear Computer Aided Design Lab, University of Arkansas, Electrical Engineering, Fayetteville, AR.**
Design Lead, Undergraduate Research Assistant: Design lead for user interfaces (GUI) for the lab's Paragon modeling software project. Responsible for design and development as well as directing the efforts of the GUI team, composed of over four undergraduate and graduate research students.
Undergraduate Research Assistant: Responsible for assisting with the design of tools to assist with CAD of Electronic Circuits for Sun Solaris 5.7. Utilizing skills in C, C++, TCL/TK, Make, and Unix shell scripting.
<http://mixedsignal.eleg.uark.edu>
- ◆ **Hewlett-Packard Corp., Richardson VLSI Laboratory, Richardson, TX (CO-OP). January-July 2001**
Software Engineer, Functional Design Verification Engineer:
Responsible for many aspects of the functional design verification of an ASIC to be used in high-performance, multi-processor computing systems. Assisted with the design process by developing software memory models and writing directed tests used to verify the functionality of the chip, one of the largest custom ASIC's ever designed. Utilized and gained experience in the areas of computer architecture, digital design (Verilog HDL), C++, Perl-scripting and Unix.
- ◆ **May-August 2002**
Software/Design Verification Engineer: Responsible for adapting the sdram memory model used for verification of HP's next generation high-end server chipset during chip design to Double-Data-Rate II specification. This involved updating the c++ functional model as well as implementing the new topology in Verilog in various simulation environments, as well as verifying erroneous operation of the chipset with hardware designers.
- ◆ **May-December 2000, Molecular Beam Epitaxy (MBE) / Scanning-tunneling Microscopy (STM) Research Facility, University of Arkansas, Physics.**
Undergraduate Research Assistant: Responsible for a research project involving use of internet development tools to create "virtual tours" of the MBE/STM facility as well as assisting graduate/doctoral students with their research.
- ◆ **May-August 1999, Bizjet International Sales and Support. Tulsa, OK.**
CAD Draftsman: Responsible for creating original drawings of custom cabinetry, avionics installations, and other structures necessary for FAA approval in corporate jet aircraft, design of paint schemes for jet aircraft and training and assisting fellow employees in CorelDraw and AutoCAD packages.

Honors:

- ◆ Awarded Chancellor's Scholarship to the University of Arkansas, valued at \$16,000 per year.
- ◆ Awarded Texas Instruments Undergraduate Research Scholarship.
- ◆ Awarded Eagle Scout Award, after 5 years of service in the Boy Scouts of America.
- ◆ Inducted into Golden Key, Tau Beta Pi (Engineering), and Eta Kappa Nu (Electrical Engineering) Honor Societies.

Personal:

- ◆ Section Leader, Drumline, University of Arkansas Marching Razorback Band, Hogwild Basketball Band.
- ◆ Percussionist/Section Leader, University of Arkansas Symphonic and Concert Bands.
- ◆ Vice-President, IEEE student chapter, member IEEE Computer Society.
- ◆ Vice-President, Eta Kappa Nu Electrical Engineering Honor Society student chapter.
- ◆ Program Chair, Tau Beta Pi Engineering Honor Society student chapter.

Selected Coursework:

- ◆ Engineering Graphics (CAD)
- ◆ Modern Physics
- ◆ Statics/□Dynamics
- ◆ Digital Systems
- ◆ C-Programming, Software Engineering
- ◆ Electronics I □ II
- ◆ Analog, Digital and Stochastic Signal Processing Courses
- ◆ Electromagnetic Fields and Waves
- ◆ Microprocessor System Design, Introduction to Computer Architecture
- ◆ Electric Energy Conversion
- ◆ Control Systems
- ◆ *Thermal Physics

□/n Progress

Personal and Professional References:

Available upon re□uest