

David H. Baird

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Education

- New Mexico Institute of Mining and Technology
Senior, BS in Electrical Engineering, Est. May 2005

Work History

- Research Assistant, June 2003 - Present
EE dept, New Mexico Tech, Socorro, NM
 - Create simulations of wireless communication networks
 - Adapted simulation software to model interference and allow power control
- Contract work, Langmuir Laboratory, Summer 2004
Designed power control PCB for airborne instrument
- Field Engineer, June 2001 - May 2003
Langmuir Laboratory, New Mexico Tech, Socorro, NM
 - Designed complex 4 layer surface mount and through hole PCB's
 - Designed digital fiber optic interface for instruments
 - Worked with PC/104 embedded computing for instrumentation
 - Field work, installed and tested scientific instruments
- Contract work, Convenient Video, Summer 2003
Designed embedded motor control system for vending machine

Memberships: IEEE, ACM, Acoustical Society of America

Awards: Winning places in ACM programming competitions 2001-2004

Publications

- A. El-Osery, D. Baird, and M. Memon, "Power control in ad hoc networks: an overview," Submitted to SPIE Defense and Security Symposium, Orlando, Florida, 12-16 April, 2004.

Other Experience

- Gameboy programmer
Designed PC to Gameboy Advance interface, PCB, microcontroller, software
- USB interface project
Designed PCB and software for Cypress FX2 USB microcontroller
- Data acquisition system
Designed digital oscilloscope for PC/XT, PCB, software, Linux drivers

Skills

Hardware: microcontrollers, FPGA's, PCB's, analog design

Software: C, C++, Python, XML, SQL, Matlab, Linux programming environment