NOAH R. WARDRIP

Home: (858) 455-6242
E-mail: nwardrip@ucsd.edu
8520 Costa Verde Blvd. #3118
San Diego, CA 92122

OBJECTIVE

Seeking a challenging full-time computer, software, or electrical engineering position requiring superior problem solving skills and with a focus on embedded systems design and implementation

EDUCATION

B.S., Computer Engineering, June 2002
University of California, San Diego, Jacobs School of Engineering
Overall GPA: 3.89/4.00

COURSE WORK

- Computer and microprocessor design and architecture, with a focus on RISC architectures
- Design and implementation of an 8-bit MIPS-like microprocessor using XILINX and an associated instruction set architecture used to run custom programs
- Implementation of a TCP offload processor using Verilog HDL, ModelSim VSIM, and LeonardoSpectrum
- Principles and theory of compiler design, with focus on an object-oriented design approach
- Design and implementation of a compiler for a Pascal-like language (Oberon-2) over two quarter classes
- Data structures in Java and C including implementation of lists, hash tables, heaps, and balanced trees
- Operating system principles, focusing on concurrency, memory management, file systems, and security
- Implementation of mutual exclusion algorithms for concurrent processes and a user level threads package using C
- Scientific visualization of data using OpenGL for 2D and 3D graphics displays and animations
- Analog and digital signal processing, focusing on convolution, sampling, Fourier analysis, and filter design
- Digital circuit components and design, with a focus on MOSFET characteristics and logic gate creation
- Active circuit design using analytical methods and PSPICE

TECHNICAL SKILLS AND QUALIFICATIONS

- Experienced with Object-Oriented programming in Java, programming in C, SPARC Assembly, HTML
- Proficient using PSPICE, MATLAB, XILINX 2.1, Protel99, JBuilder 6.0, and Visual C++ 6.0
- Experienced with Windows 98, Me, NT, 2000, XP, UNIX, and Mac OS
- Comfortable operating lab equipment such as the oscilloscope, function generator, and soldering iron
- Exceptional problem solving and analytical skills; Resourceful when problems are difficult to solve
- Detail-oriented, efficient, and disciplined work habits; Strong commitment and determination to finish projects

RELEVANT WORK EXPERIENCE

Computer Engineer Intern, Xsilogy, Inc.
Sorrento Valley, CA. June 2001 to Present

- Fully designed and created hardware and software for an automated programming and testing system to be used during different production stages of a wireless sensor interface device
- Revised, wrote, and debugged firmware written in C for embedded PIC micro-controllers
- Became familiar with serial and wireless data transmission protocols for Axonn digital radios
- Updated and improved hardware and software for an existing product's automated testing system
- Designed two printed circuit boards containing radio support, LED, and Reed switch circuitry.
- Performed surface mount and through-hole soldering for prototyping and testing of circuit boards
- Established testing protocols and created custom applications for tests on wireless sensor interface devices
- Learned and adapted quickly to assist engineers with several existing projects

Java Programming Lab Tutor, UC San Diego Computer Science and Engineering Department
La Jolla, CA January 2000 to June 2000, April 2001 to June 2001

- Instructed and explained Java programming techniques to students in a clear and professional manner, becoming well acquainted with foundational concepts object-oriented software design
- Graded students' programming assignments through interviews with fairness and responsibility
- Worked independently and reliably by never skipping unsupervised, assigned hours

Desktop Support Assistant, UC Davis Regional Primate Research Center
Davis, CA Summer 1999 and Summer 2000

- Designed and implemented a custom Java application to analyze and archive temperature and humidity sensor data, notifying the staff if there is a problem
- Diagnosed, repaired, and maintained 200+ Macintosh and Windows NT computers and 20+ printers; conducted business professionally and courteously with the employees

AWARDS RECEIVED

- Madge E. Lawhead Scholarship Recipient for academic achievement at UCSD, July 2000
- Provost Honors for 10 quarters at UCSD
- Outstanding Academic Achievement (4.0 unweighted, 4.23 weighted High School GPA), June 1998
- Earned third place in the state on the Academic Decathlon State Competition Mathematics exam, April 1998

ADDITIONAL EXPERIENCES

- Volunteered to go on a Campus Crusade for Christ summer project for 2 months during the summer of 2000 to help the homeless, needy, and children of inner city LA