

# ZOE ADAMS

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## EDUCATION

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**California State University Long Beach** Long Beach, Ca U.S.A. • Master of Science in Computer Science option in Computer Engineering, currently in progress

Cumulative GPA: 4.00/4.00 • Selected Coursework:

**Electrical Engineering** RTL Circuit Design · SOC Design · Computer Architecture

**Computer Science** Parallel Algorithm Design · Object Oriented Programming · Advanced Algorithm Analysis · Computer Vision

**University Of California Riverside** Riverside, Ca U.S.A. • Bachelors in Computer Engineering with minor in Mathematics, 2005

Cumulative GPA: 3.5/4.00 • Selected Coursework:

**Electrical Engineering** Control Systems Analysis & Design · Digital Signal Processing · Embedded Systems Design

**Computer Science** Unix Programming · Computer Vision · Automata Theory · Real Time Operating Systems · Algorithm Analysis & Design · Object Oriented Programming

**Mathematics** Advanced Differential Equations · Discrete Math · Linear Algebra · Multivariable Calculus

## SIGNIFICANT PROJECTS

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- Implemented a fully pipelined MIPS processor in VHDL
- Designed and implemented a portable video game on an Xilinx FPGA with VGA and audio output and drum-like input
- Developed a TCP/IP communication library for video phone service and file transfer between PC and WinCE

## WORK HISTORY

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**Unitech America Inc. - Research and Development** (2005 - present)

### R&D Engineer

- Wrote device drivers, kernel modifications, and applications for hand held and wall-mounted terminal systems running Windows CE in C, C++, C# and assembly
- Wrote functional logic for CPLDs in VHDL and provided verification and analysis of PCB design
- Maintained products (design, customer support, bug fixes, and feature upgrades) from conception to EOL
- Implemented a LAMP based website with MYSQL that provided product promotion and service, support, and sales record keeping and analysis

**ISCA Technologies** (2004 - 2005)

### Engineering Intern

- Implemented algorithms in C on TI MSP430 processor to identify insects by flight-sound signature and size and publish captured data on network
- Created field control system for mosquito traps that released CO2 and ran heater based on environmental conditions
- troubleshoot and repair circuitry for above

**Student Computing Services at UCR** (2003-2005)

### Computer Consultant

- Provide one-to-one help for students with computer problems/questions
- Maintain and resolve problems for school computer network

## SKILLS

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- Expertise in developing in C, C++, C#, Python, PHP, VHDL, embedded IC programming, WinCE OS
- Proficient with Assembly, Java, Javascript, Schematic design in PSpice, Matlab, circuit analysis and debugging with oscilloscopes and digital logic analyzers  $\LaTeX$
- Experience programming in Windows and UNIX environments

## HONORS AND AWARDS

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- Governor's and Regents Scholarship Recipient
- Winner of Embedded Systems Senior Design Contest at UCR
- Dean's List and University Honor's Program member at UCR