Adnan Dzebic

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EDUCATION

SAN JOSÉ STATE UNIVERSITY
BS in Electrical Engineering
Expected May 2016
Cum. GPA: 3.10 / 4.0

COURSEWORK

Current Semester
Embedded Control System Design
Analog Peripherals for Embedded Sys.
Fundamentals of Networking
Digital Design with FPGAs

Previous Semesters
Microprocessor System Design + Lab
Electronic Design + Lab
Physical Electronics
Digital Logic Circuit Design + Lab
Signal Processing
Circuits and Systems

SKILLS

PROGRAMMING

Over 5000 lines:
Python • C++ • Java • C • MATLAB
Shell • HTML5/CSS3 • LaTeX

Over 1000 lines:
ARM® Assembly • Verilog • PHP
JavaScript • SQL • Rails • Django

Familiar:
OpenCV • Julia • Clojure • Go

LINKS

Github:// **adnandzebic**
LinkedIn:// **adnandzebic**

AFFILIATIONS

2015 **IEEE** Member
2015 **SCE** Member
2015 **SJSUARC** Member
2014 **PEMS** Officer/Coordinator
2013 **LCC** Member

SKILLS

SOFTWARE

- Fluent in Linux (Arch Linux and Linux From Scratch) and the Command Line Interface
- Uses open source software daily (VIM, OpenSSH, Docker, etc.)
- Experience with multi-threaded and object-oriented programming
- Able to create a skin-based website with client-server communications
- Familiar with web frameworks (Django, Ruby on Rails, Zend Framework, etc.)
- Comfortable with using Git and capable of writing presentable code/documentation using LaTeX
- Passionate to acquire new skills that improve my productivity

HARDWARE

- Good grasp on digital logic design fundamentals
- Familiar with EDA and CAD tools like gEDA, KiCad and DipTrace
- Circuit simulation using open source and closed source software (LTSpice, Ngspice)
- Experience with FPGAs and the accompanying design software (Xilinx ISE)
- Involvement with printed circuit board design software
- Comfortable with lab tools like oscilloscopes, function generators, multimeters, soldering tools, etc.

ACADEMIC PROJECTS

IMPLEMENTATION OF DIFF EQNS | Using Op Amps and SPICE

February 2015 | San José, CA
Created op amp based circuits of systems described by mathematical models. This included the Hindmarsh-Rose model for neural activity that contains three coupled differential equations for modeling the bursting behavior of neurons.

DESIGN OF BANDPASS FILTERS | Using MATLAB

November 2014 – December 2014 | San José, CA
Worked with Devin Pérez and Prof Birsen Sirkeci to create FIR filters and apply them to sample signals for decoding and encoding purposes. The signals were processed in MATLAB using frequency domain analysis where the amplitude gain of the output signals were processed carefully.

DESIGN OF TRAFFIC SIGNAL CONTROLLER | Using Logic Circuits

December 2014 | San José, CA
Developed mostly from scratch using flip-flops and some additional logic gates. It required an understanding of Finite-state machines and more specifically, Moore machines.

DESIGN OF 4-BIT COMPARATOR | Using FPGAs and Verilog

November 2014 | San José, CA
This project was done using the Verilog hardware description language in Xilinx ISE and a Spartan 3E Development FPGA board from Digilent Inc.

OFF-GRID PHOTOVOLTAIC SYSTEM | Using Solar Cells

January 2013 - August 2013 | East Bay, CA
Worked with a student-team of engineering students to design an off-site solar charging station that provides students with a source of electricity to charge small personal electronics in areas where conventional electrical outlets are not available. Solar tracking algorithm and mechanical system designed in conjunction with LCC.