

## Profile

Objective, creative, and well-rounded individual that applies interpersonal skills and proven design abilities in hardware, firmware, and software development to create a competitive edge

## Work Experience

### *Electrical Engineering Associate*

Tandem Diabetes Care, Inc. – June 2009 to Present

- Designed automatic data collection program in Emacs LISP for performance analysis of onboard air pressure sensing system
- Finalized self-testing platform that allowed for automatic testing of a system circuit board with minimal user interaction and automatic pass/fail result assignment (continued from previous position)

### *Electrical Engineering Intern*

Tandem Diabetes Care, Inc. – October 2008 to June 2009

- Created MathCAD tool to model nonlinear discharge and load behavior to calculate lifetime of a Lithium battery in system
- Characterized and prototyped wire actuator technology to investigate potential power use reduction in pump drive
- Revised custom software written in Emacs LISP to execute scripts of embedded systems commands with improved performance
- Independently developed series of scripts that send embedded systems commands and gather performance data in Emacs LISP
- Constructed prototypes of system for Premarket Notification (510K) by testing the units for correct assembly with LISP

### *Electrical Engineering Intern*

Cubic Defense Applications, Inc. – June 2008 to October 2008

- Created an Access database and interfaced it to existing custom test data capture software to allow for trend analysis
- Shadowed electrical engineer during hardware design process
- Soldered and tested designs of prototype SMD circuits

### *Systems Engineering Intern*

Lockheed Martin Corporation – June 2007 to June 2008

- Reduced by 97% time required to complete MS Office common tasks by automation via programming Visual Basic macros
- Wrote test software in MATLAB to parse network communication test data and perform error analysis
- Constructed and maintained system diagrams in NetViz to graphically display logical and functional relationships

### *Electrical Engineering Intern*

Beigel Technology Corporation – June 2006 to August 2006

- Wrote and maintained project documentation
- Completed and submitted patent application

## *Quality Assurance Intern*

Electric Power Research Institute – August 2005 to May 2007

- Stored and maintained active inventory of quality assurance reports and records in a process controlled environment
- Digitized nuclear research records for safety archiving

## **Education**

Bachelor of Science, Electrical Engineering  
San Diego State University  
January 2010 with overall GPA of 3.21

## **Honors/Awards**

### *San Diego State University*

- Managed team of four engineering students to complete senior design of an inductive Lithium Polymer battery charger powered from a USB terminal
- 2009 ASME Scholarship
- Dean's List

### *San Jose State University*

- 2006 Global Technology Initiative in China and Taiwan
  - Represented College of Engineering to foreign industry and university delegations
  - Experienced foreign academic and business culture
  - Promoted awareness of technological globalization
- 2006 College of Engineering Dean's Scholarship
- Dean's List

## **Special Skills**

### Programming Languages

- Assembly
- Emacs LISP
- C/C++
- Java
- Visual Basic
- PHP, Javascript, and HTML
- SQL/MySQL
- MATLAB

### CAD Software

- OrCAD and Altium schematic capture
- MathCAD

### Foreign Languages

- Spanish – Fluent
- Brazilian Portuguese – Conversational
  - Self-taught during extracurricular cultural immersion in Rio de Janeiro, Brazil 2008

## **Professional**

IEEE  
Toastmasters International

References available upon request