

# KRISTINE KHANH TRAN

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## Objective:

- Summer internship position in the field of Electrical and Computer Engineering, specifically space systems design, application in digital/analog electronics, and microprocessor-based systems.

## Education:

09/2012-06/2016

UNIVERSITY OF CALIFORNIA, SAN DIEGO

*Major: Computer Engineer (ECE)*

*Class Level: Junior*

*GPA: 3.0*

## Relevant Coursework:

### Engineering Computation

- **Software:** C programming, Javascript, HTML, PSpice(OrCAD), SolidWorks, Xilinx, and Matlab.
- **Hardware:** Digital Communications, I/O Buffering, Image Processing, Microcontrollers, PCB Layout Tools, Semiconductor, Signal Processing, Simulink, Motors and Servers, Multimeter, Oscilloscope, Function Generator, Power Supplies, and Soldering Iron.

### Introduction to Digital Design

### Introduction to Analog Design

## Key Skills:

- Solid understanding of electrical engineering theory, industry-standard circuit design, and testing tools.
- Managing and executing engineering projects and resolving technical issues.
- Strong analytical, problem solving, decision-making and excellent communication skills.
- Well-developed interpersonal skills with proven leadership abilities in a team environment.
- Able to design and conduct scientific and engineering experiments, as well as to analyze and interpret data.
- Able to design systems, which include hardware and software components.

## Experiences:

08/2009-09/2012

NASA'S AMES RESEARCH CENTER, Mountain View, CA 94035

*NASA Robotics Alliance Project / High School Internship*

- Designing, building, testing and programming robots using LEGO MINDSTORMS technology.
- Using KISS-IDE, KISS-C Sensor, KISS-C Servo, and KISS-C Motor as the KIPR Link IDE.
- Updating the Firmware using KIPR Link and AC Adapter.
- Controlling an iRobot Create with the KIPR Link.
- Documenting the design evolution, materials used, problems encountered & resolved, decisions made, and test results obtained.

07/2008-08/2012

AESTHETIC DENTAL, San Carlos, CA 94070

*Dental Assistant*

- Taking, developing and processing dental x-rays and maintaining x-ray machinery, performing required laboratory procedures, using four-handed assisting technique and keeping dental equipment in good condition at all times.
- Modifying and repairing all dental appliances used to straighten teeth.
- Determining the modifications needed in dental products.
- Utilizing tooth replica on apparatus and appraising its functionality.
- Using preventive measures to melt metals, acrylic pastes and to shape dental prosthetic devices.

## Relevant Extracurricular Design Project:

### IEEE ViaCar

- Building an autonomous 1/10 scale RC car that can race around track marked by a wire carrying a sinusoidal current at 75kHz with amplitude 100mA.
- Modeling the effects of various non-idealities in the ViaCar environment including sensor orientation, noise, non-idealities of the analog input signal path, finite sampling rate and resolution, time delays, mass, inertia, and friction.
- Hand analysis and SPICE simulation of relevant circuits.
- Prototyping of relevant circuits on breadboard and characterization of performance.

### Intuit DevOps Hackathon

- Creating an Android app that connected UCSD students with the top students from the past and present by helping them get instant access to all the relevant notes and study materials for particular class.
- Designing UI layouts and the screen elements by using Android's XML vocabulary.

## Memberships:

- 09/2012-PRESENT IEEE- The Institute of Electrical and Electronics Engineers
- 09/2012-PRESENT SWE - Society of Woman Engineers
- 09/2012-PRESENT EWB - Engineers Without Borders
- 09/2012-PRESENT SASE - Society of Asian Scientists and Engineers

## Awards:

- April 2012 **President Volunteer Service Award** *from President Obama*
- April 2012 **Certificate of Appreciation** *from Congressman Mike Honda*
- February 2011 **Senator Award (Sciencepalooza)** *from Barbara Boxer*
- July 2009 **3<sup>rd</sup> place in International Robotic Competition** *sponsored NASA Robotics Alliance Project*

## Scholarships:

- April 2012 **Coca Cola National Scholar** *Top 50 out of 84,000 scholars*
- April 2012 **Good Tiding Scholarship** *sponsored by San Francisco Giants*
- March 2012 **Vietnamese American Professional Women Scholarship**
- February 2012 **Rotary Youth Leadership Scholarship**
- June 2014 **Society of Women Engineers Scholarship**

## Reference:

Available upon request

