

# JONATHAN TAM, EIT

www.portfolium.com/jonathantam | (626) 524 – 8005 | jktam336@gmail.com

---

## **EDUCATION**

**California Polytechnic State University, Pomona**

B.S. with Cum Laude in Mechanical Engineering

Honors: Dean's List, Pi Tau Sigma Honor Society, Tau Beta Pi Honor Society

**June 2016**

**GPA: 3.56**

## **SKILLS**

- Software: AutoCAD Inventor, SolidWorks, FEMAP, Nastran
- Programming: Matlab, Visual Basic, Arduino C, HTML, CSS
- Languages: Cantonese (Limited Working Proficiency), Mandarin (Elementary Proficiency)

## **WORK EXPERIENCE**

**Summer Research Assistant**

July 2014 – August 2014

Chinese University of Hong Kong

- Designed a three-axis linear stage to achieve nano-precision movements for microcontact printing of flexible electronic devices
- Developed a ball screw torque calculator using Visual Basic to cut down calculation time from 30 minutes to 1 minute

**Design Engineer Intern**

July 2013 – August 2013

Delta Light – Asia (China)

- Created and edited engineering drawings for LED light fixtures in SolidWorks
- Supported in the optimization of designs for cost, manufacturability and serviceability
- Prevented damage to thousands of products by introducing packaging that evenly distributes loads
- Gained hands-on experience by creating a new concept for a light fixture

## **PROJECTS**

**Northrop Grumman Collaboration Project – Unmanned Underwater Vehicle**

Projectile Team Lead

October 2015 – June 2016

- Led a team of 3 in designing a subsystem which utilizes wireless communication to fire motorized projectiles at a target

**Remote Electronics Unit (REU) Thermal Design Project**

January 2016 – March 2016

- Performed a thermal analysis of an airplane's REU box that is emitting 45W of heat throughout an altitude operating range of 0 meters to 12,000 meters
- Developed a systems of equations solver using Matlab to model the transient thermal system
- Identified a viable thermal design which will manage system temperatures to within 70°C
- Presented design reviews and a technical design report

**Human Powered Vehicle Challenge**

November 2013 – September 2015

Vice President

- Designed and manufactured a recumbent bicycle which placed 8<sup>th</sup> in the endurance race and 9<sup>th</sup> in the men's sprint out of 27 competitors as a rookie team