# CHENG-CHIEH FANG

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## **EDUCATION**

UNIVERSITY OF MASSACHUSETTS, Lowell, MA

Master of Engineering in Mechanical Engineering GPA: 3.4

KUN SHAN UNIVERSITY, Tainan, Taiwan

June 2004

December 2013

Bachelor of Science in Mechanical Engineering GPA:3.35

# ACADEMIC and PROFESSIONAL EXPERIENCE

Master of Engineering Candidate, Lowell, MA

September 2012 – December 2013

## Engineering projects

- Completed a Solar Energy Engineering Project for environmental monitoring and recording; Gathered and processes data to determine the daily isolation and temperature data for global specified location and time.
- Collaborated on a Solar Fundamental Project which explored the advantages and product manufacturability of a solar collector and various coating specifications for efficiency determination.

TAIWAN NAVY, Kaohsiung, Taiwan

August 2005 – August 2010

## Marine Engineering Officer – Lieutenant (January 2009 – August 2010)

- Led a team of 54 engineers in the completion of professional assignments and naval maneuvers.
- Served as a watch officer in the engine room monitoring the Lafayette-class frigates power system for the entire ship; conducted power system maintenance to ensure high performance of the frigate.
- Five year experience in managing purchasing of machinery and parts.
- Emergency Diesel Generator, Diesel Engine driven Fire Water Pumps and HVAC system.
- Multi stage Air Compressors, Air dryer, Air Heaters.

## Damage Control Officer -Second Lieutenant (August 2005 – January 2009)

- Implemented maintenance and damage control to prevent damages caused by fire, flooding, power-off, and other unforeseen circumstances to ensure an operational and safe warship on the ocean.
- Trained and supervised personnel in labor and health safety to prevent work disasters and injuries.
- Analyzed and projected any unforeseen circumstances to ensure an operational and safe warship.

## ADDITIONAL TRAINING

ARMY CHEMICAL WARFARE CORPS SCHOOL, Taoyuan, Taiwan

April 2008

Radiation Safety Training Program

NAVAL TRAINING SCHOOL, Kaohsiung, Taiwan

February 2006

Pre-job Training Engine Room Watch Officer

NAVAL ACADEMY, Kaohsiung, Taiwan

August 2005

Professional Military Officer Courses in Marine Engineering

#### **CERTIFICATIONS**

Certificate of Labor Safety and Health Education, Labor Safety & Health Association of Taiwan, 2010 Professional and Technical Personnel Level 1 Engineer, Examination Yuan of Taiwan, 2009 Technician Certificate of Labor Safety and Health Management, Council of Labor Affairs Executive Yuan, 2008

Certificate of Naval Ship's Engine Room Watch Officer, Naval Training School, 2006 National Certificate of Life Guard Water Saving, National Water Life Saving Association, 2001

#### HONORS & AWARDS

First Prize of Naval Warfare Technique Competition, 2009 ~ Naval Commendation Medal, 2008

## SKILLS SUMMARY

<u>Technical:</u> Abaqus (Finite element analysis), LabVIEW,MATLAB, Auto CAD, Adobe Premiere, Adobe Photoshop, Flash, Microsoft word, Excel, and Powerpoint, Access, Publisher <u>Languages:</u> Fluent in English, Mandarin, Chinese, and Taiwanese