## Ho-Zhen D. Chen

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#### **UNITED STATES CITIZEN**

#### **EDUCATION:**

University of Massachusetts Amherst, Amherst, MA Fall 2015-Spring 2017

PhD, Civil and Environmental Engineering GPA: 3.23 /4.0

University of Michigan, Ann Arbor, MI Graduated: May 2015

Master of Science, Civil and Environmental Engineering GPA: 3.3/4.0

Rensselaer Polytechnic Institute, Troy, NY Graduated: May 2011

Bachelor of Science, Mechanical Engineering GPA: 3.37/4.0

Dean's List

**Tampere University of Technology,** Tampere, Finland Spring 2010 (exchange)

Greenfield Community College, Greenfield, MA Graduated: June 2008

Associate of Science, General Engineering GPA: 3.87/4.00

Dean's List

## **RESEARCH EXPERIENCE:**

### Pan-Arctic Assessment of Hydraulic Geometry, Dr. Gleason

Sep 2016- Sep 2017

University of Massachusetts Amherst

River width extraction via Google Earth Engine (GEE) and estimation of at-a-station hydraulic geometry.

• AGU poster presentation: A pan-Arctic Assessment of Hydraulic Geometry

### Algal Bloom Detection through Remote Sensing, Dr. Park

Aug 2015-May 2016

University of Massachusetts Amherst,

Algal Bloom detection in the Arabian/Persian Gulf region using MODIS Aqua/Terra Images. Time series analysis of satellite images for estimation of bloom propagation to assist in early warning system for local desalination plants.

#### Bio-Station Wireless Network, Dr. Kerkez

Aug 2014-Aug 2015

University of Michigan, Civil and Environmental Engineering,

Redesign and setup of wireless sensor network. Power supply/storage design, hardware assembly, electronic wiring and software programming, radio transmission setup, and data management.

### Huron River Water Sensor, Dr. Kerkez

Sep 2013-Aug 2014

University of Michigan, Civil and Environmental Engineering,

Design and assemble of water depth, velocity sensor. Learning of basic programing language (Python, C++.)

### **WORK EXPERIENCE:**

**Research assistant** University of Massachusetts, Amherst, MA

Sep 2016- Sep 2017

River width extraction via Google Earth Engine (GEE) and estimation of at-a-station hydraulic geometry.

**Research assistant** University of Massachusetts, Amherst, MA

Sep 2015- Sep 2016

Remote Sensing using MODIS Aqua/Terra images for detection of harmful algal bloom in the Arabian/Persian Gulf.

**Research assistant** University of Michigan, Ann Arbor, MI

Aug 2014-Aug 2015

Design and deployment of low-powered, durable, low-maintenance wireless sensor network

(WSN)

Engineer, HAITEC Co., Ltd, New Taipei City, Taiwan

Oct 2011-Jul 2012

CAD design and analysis on parts for electric vehicles. Occasional meetings with suppliers and frequent assembly plant visit.

**Intern (Laboratory technician),** Atlantic Testing Laboratory, Troy, NY May 2009-Nov 2009 Perform safety test on construction materials. Scheduled work plans with co-workers and daily testing report to supervisors.

**Peer Tutor**, Greenfield Community College, Greenfield, MA

Jul 2007 – Dec 2007

Communicated with people from all walks of life through scheduled meetings to help student successfully pass courses.

# **SKILLS:**

**Software:** Google Earth Engine, Google Earth, SeaDAS, ENVI, ArcGIS, Matlab, SolidWorks, Catia, Maple, Mathematica, EES, Minitab and basic HTML.

Programming: R, JavaScript, C++, Python, Visual Basic, and UNIX programming language

**Language:** <u>Understand traditional Chinese (lived in **Taiwan** for 17 years.)</u>

#### **ACTIVITIES & HONORS**

2013-Present
2013-Present
2015-present
2015-present
2015-present
2015-present