

Ho-Zhen D. Chen

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UNITED STATES CITIZEN

EDUCATION:

University of Massachusetts Amherst, Amherst, MA (Did not complete) 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 Dean's List **GPA: 3.37/4.0**

Tampere University of Technology, Tampere, Finland (Student Exchange) Spring 2010

Greenfield Community College, Greenfield, MA Graduated: June 2008
Associate of Science, General Engineering Dean's List **GPA:**
3.87/4.00

WORK EXPERIENCE:

Student Teaching Holyoke High School, Holyoke, MA Jan 2020-Present

Substitute teacher/para-specialist PVCICS, Hadley, MA Sep 2017-Dec 2019
Long-term substitute teacher and front desk staff at Pioneer Valley Chinese Immersion Charter School.

- Front office Sep 2018 - Dec 2019
- 8th Grade Math substitute Sep 2018 - Feb 2019
- 8th Grade Chinese substitute Sep 2017 - June 2018

Research assistant University of Massachusetts, Amherst, MA Sep 2015- Sep 2015
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 2014
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.

CERTIFICATIONS AND LICENSES:

01 Communication and Literacy Skills - Reading

01 Communication and Literacy Skills - Writing

09 Mathematics

29 Chinese (Mandarin)

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 programming language (Python, C++.)

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: Understand traditional Chinese (lived in Taiwan for 17 years.)

ACTIVITIES & HONORS

Pioneer Valley Roller Derby

2017-Present

American Society for Engineering Education

2013-2017

Association of Environmental Engineering & Science Professors

2013-2017

American Society of Civil Engineers	2015-2017
American Water Works Association	2015-2017
American Geophysical Union	2015-2017
Water Environment Federation	2015-2017
Rensselaer Polytechnic Institute Club Water Polo	2010-2011