550 Memorial Drive #4B-4, Cambridge, MA 02139

617-899-9748

niz@mit.edu

#### **EDUCATION**

## Massachusetts Institute of Technology, Cambridge, MA

Jun 2013

Master of Engineering in Environmental and Water Quality Engineering

### National University of Singapore, Singapore

2008 - 2012

Bachelor of Engineering (Environmental Science) Honors GPA 4.25/5.00

#### Purdue University, West Lafayette, IN

Fall 2011

Selected to participate in the Student Exchange Program

#### PROFESSIONAL EXPERIENCE

# Housing & Development Board, Singapore, Research Intern

Dec 2011

- Completed a comprehensive feasibility study on gray water recycling in HDB estates; Findings are used extensively
  to support implementation of the project
- Conducted a project on siting and designing of floating wetland in new Punggol Waterway; Design proposal was selected as the base design for future implementation

# Australian National University, Canberra, Australia

Jun 2010

 Selected as 1 of the 3 NUS delegates to attend IARU Global Summer Program on International Environmental Policy

#### RESEARCH

#### **Final Year Dissertation**

2011-2012

- Collaborated with Singapore Public Utility Board on a 1-year project to investigate the contaminant removal performance of a pilot-scale UV/H<sub>2</sub>O<sub>2</sub> reactor in Chua Chu Kang Waterworks
- Initiated a lab-scale Granular Activated Carbon Column to optimize the removal performance of oxidation byproducts produced

#### **NUS Department of Marine Science.**

2007

#### Laboratory researcher

 Attached with NUS Department of Marine Science under Science Research Program to conduct research on taxonomy and documentation of cyanobacteria in the local sea

#### **LEADERSHIP**

# Institute of Engineers (Singapore), NUS Branch

2009 - 2010

- **Executive Board**
- Initiated and organized regular networking events to connect the NUS IES members with IES alumni
- Contacted companies and arranged a well-received company visit for a group of approximately 30 students

#### **AIESEC NUS Social Entrepreneurship Project,**

2008 - 2010

#### **Director for External Relation**

- Liaised with AIESEC partners and secured funding for the project
- Initiated and arranged interviews with several local social entrepreneurs to raise awareness about social entrepreneurship among NUS student body
- Launched a campus-wide Social Entrepreneurship Week that included two panel discussions which attracted hundreds of students, a 1-day workshop which accommodated 30 students and an exhibition at the university which featured several successful social enterprises

# **AWARDS**

NUS Engineering Dean's List

2011

NUS Engineering Scholarship for PRC Undergraduate

2008-2012

Singapore Ministry of Education Pre-U Scholarship and Junior-Middle 1 Scholarship

2007-2008

Singapore Youth Festival Competition for Strings Gold with Honors

2008

# **SKILLS**

MATLAB, AutoCAD, C Language, MS Office, Photoshop, Mandarin (native)