LIQIANG HE

3405, NW, Orchard Ave, Apt 176, Corvallis, Oregon 97330 | C: 541-740-4022 | helq2612@gmail.com

Education

Master of Science: **Computer Science**   Anticipated date of graduation: **06/2017**
Oregon State University   Corvallis, OR, US
Advisor: Dr. Rebecca Hutchinson   GPA: 3.5

Master of Engineering: **Mechanical Engineering**   **07/2015**
Oregon State University   Corvallis, OR
Advisor: Dr. Vinod Narayanan   GPA: 3.5

Master of Science: **General Mechanics and Basic Mechanics**   **07/2007**
Southwest Jiaotong University   Chengdu, Sichuan, China
Advisor: Prof. Ming Zhang   GPA: 3.2

Bachelor of Science: **Mechanical Engineering**   **07/2004**
Southwest Jiaotong University   GPA: 2.9   Chengdu, Sichuan, China

Experience

Research Assistant   **10/2015 to Current**
Project: Species Distribution Modeling, Oregon State University   **Corvallis, Oregon**
- Study a Semi-Parametric Framework for Class-conditional Label Noise in Dr. Rebecca Hutchinson's Research Group (see Publications) .
- Explore noise influences from both class features and noise features.
- Implement "sqldf" package in R to manipulate big database system.

                                                                                    01/2016 to 03/2016
Project: CNN Deconvolution Boundary Detection, Oregon State University   **Corvallis, Oregon**
- Proposed a neural network architecture to detect boundaries in image by learning a CNN as feature detector, and deconvolve learnt features to restore images with clear contours.
- Achieved stable and reliable CNN Deconvolution Boundary Detection results.
- Used Python, C++, and Caffe

Research Assistant   **05/2014 to 04/2015**
Project: MuTherm, Oregon State University   **Corvallis, Oregon**
- Innovated a micro-combustor of CH4 in Dr. Vinod Narayanan's research group.
- Achieved significant low heat loss by decreasing the critical length (channel height) of the device to 200 μm, with combustion rate of fuel of 98% at low temperature (only 500 ^{o}C).

Manager of Biding & Project Management   **07/2007 to 02/2011**
Jinxiang Sports Facilities Engineering Co   **Suzhou, Jiangsu, China**
- Finished 21 projects, amount over $6,500,000.
- Liaison with customers, including elementary school, mid/high school, and local governments.
- Managed a 23-person's construction group, oversaw constructions of facilities.

Publication

Rebecca A. Hutchinson, Liqiang He, and Sarah C. Emerson. "Species Distribution Modeling of Citizen Science Data as a Classification Problem with Class-conditional Noise", in Proceedings of AAAI-17.

Skills

Python, R, Java, C, C++, MATLAB, JavaScript, Caffe, Theano, OpenGL, OpenMP, MySQL, Hadoop