LIQIANG **HE**

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**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 , with combustion rate of fuel of 98% at low temperature (only 500 oC).

**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