Houpei Li, EIT

hli84@illinois.edu Looking for Summer Internship in 2017

Educations

University of Illinois at Urbana-Champaign (UIUC)

08/2013-Date

Degree: M.S. in Mechanical Engineering (May 2016)

Ph.D Candidates in Mechanical Engineering (Estimated Graduation in Summer 2018)

GPA: 3.84

Research Advisor: Predrag Hrnjak University of Kentucky (UK)

08/2011-05/2013

Degree: B.S. in Mechanical Engineering (May 2013)

GPA: 4.0

Passed Fundamentals of Engineering Exam

China University of Mining & Technology (CUMT)

09/2009-07/2011

Degree: B.E. in Mechanical Engineering and Automation (July 2013)

GPA: 3.63

I obtained both Bachelor degrees through the 2+2 Joint Program between UK and CUMT

Research Experiences

$Evaporation \ and \ Condensation \ of \ New \ Low \ GWP \ Fluids \ W/ \ and \ W/o \ Oil \qquad Summer \ 2015-Date$

ACRC project 361, assembled a facility and tested heat transfer coefficient and pressure drop of refrigerants

Heat Transfer Experiment Facility Design and Assemble

Summer 2014 – Spring 2015

Designed and assembled a heat transfer experimental facility for refrigerants mixtures

Using Large Eddy Simulation for turbulent research

Spring 2013

LES-Smagorinsky model was used to model a wall-bounded flow

Numerical analysis of a turbulent channel flow facility

Fall 2012

Used the commercial code CFX to model the Turbulent Channel Flow Facility at University of Kentucky

Course Projects

Heat Transfer Mini Research Numerical Project (Team Work)

Spring 2014

Used commercial code Fluent to model CPU cooling heat sink performance

Heat Transfer Numerical Project

Fall 2013

Used Matlab to analyze a heat transfer problem in ball bearing manufacturing process

Mechanics Analysis of Plate-like Pipe Holder

Spring 2013

Used ANSYS to simulate a plate-like pipe holder and analyze the stress

Design an Exhaust System for Formula SAE Car (Team Work)

Fall 2012 - Spring 2013

Used acoustic code SIDLAB to model mufflers and fabricated the headers and mufflers for a FSAE car

Mechanical Design of Gearbox (Team Work)

Spring 2012

Designed a gearbox that requires transmitting power from the turbine coupling to the generator coupling

Skills:

Programming: C++, Fortran 95, Matlab, ESS, LabVIEW

Software: Solid Edge, Pro-E, Visio, Pointwise, CFX, Fluent, Tecplot, Sidlab, ANSYS, Latex

Experiences with supercomputers, Linux command lines, and Ubuntu OS

Programming: Mandarin (Native), English (Fluent)

Scholarships & Fellowships

Teaching & Researching Assistant

Summer 2014 - date

Departmental Fellowship, UIUC

Fall 2013

International Engineering Transfer Student Scholarship, UK

Spring 2012 & Spring 2013

Fall 2012 & Spring 2013 International Student Tuition Scholarship, UK University Scholarship, UK Spring 2013 Excellent Students, School of Mechatronic Engineering, CUMT **Fall 2010**

Awards and Honors
Secretary, Pi Tau Sigma, Mechanical Engineering Society, UK **Fall 2012-Spring 2013** Phi Sigma Theta, Engineer Honor Society, UK Spring 2012 First Prize of Mechanical Design Competition, CUMT Spring 2011