XIANG(SHAWN) HE
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EDUCATION

2010 - 2012

OKLAHOMA STATE UNIVERSITY Stillwater, OK
Master of Science, Mechanical Engineering, December 2012, GPA: 3.2, Major GPA: 3.3
Position: Research Assistant in Building Thermal System Research Group
Research Activities: Writing source code for upgrading EnergyPlus, developing new ground-coupled heat transfer models for EnergyPlus, modeling various buildings in EnergyPlus to test the model
HVAC Courses: Building Simulation, HVAC System Design, Thermal System/Heat Pump System Design, Refrigeration, Advanced Thermodynamics, Heat Transfer, Numerical Engineering Analysis
Academic affiliation: ASHRAE student member
Honors: scholarship of research assistant, papers accepted by ASHRAE conference 2013,Denver,CO

2006 - 2010

XI'AN UNIVERSITY OF ARCHITECTURE AND TECHNOLOGY Xi'an, China
Bachelor of Science, Mechanical Engineering, GPA: 81/100, Major GPA: 88/100
College Entrance Exam: 580 (96th percentile)
Honors: College scholarship of good academic performance, National Computer Certification Level 2 (C language Programming)

EXPERIENCE

2010 - 2012

BUILDING & ENVIRONMENAL THERMAL SYSTEM RESEARCH GROUP Stillwater, OK
Research Assistant

Writing source code for new version of EnergyPlus, developing ground-coupled model for EnergyPlus, developing a more effective finite differential solver and integrate the auxiliary SLAB program into EnergyPlus main program to analyze the effect on ground heat transfer simulation result
Renovation project of DHS-CAP building in Oklahoma City(Energy modeling and HVAC system design)
Modeling equinox house in EnergyPlus to analyze building thermal loads and energy consumption
Developing program in VBA to simulate/model heat pump pumping/piping system of a motel
Developing a library of pipe fittings for common piping system simulation
Developing a program to apply latest ASHRAE clear sky model to simulate solar radiation
Setting up thermocouple experimental lab and guiding undergraduate students to finish their corresponding course project in the lab

Summer 2010

SHAANXI REFRIGERATION ASSOCIATION Xi'an, China
Assistant Engineer Intern

Trained to design refrigeration systems of a refrigerated warehouse
Studied designing various refrigeration systems

Summer 2009

WUHAN IRON AND STEEL GROUP Wuhan, China
Assistant Engineer Intern

Supported senior engineers to design industrial ventilating system and industrial boiler
Trained to design industrial ventilating system

Fall 2008

TSINGYUN AIR CONDITIONING COMPANY Xi'an, China
Assistant Engineer Intern

Supported senior engineers to design HVAC system of a 6-storey hotel building
Trained to design HVAC systems of various buildings, i.e. office building, hotel and nightclub

SKILLS

Major Area: Energy simulation/modeling, heat pump system design, HVAC system simulation
Programming languages: FORTRAN, VBA and C
Design software: EnergyPlus, EQuest, HVAC sim+, AutoCAD, Office 2007, Google, Carrier I
Math tool/software: Scilab, Matlab and EES