

YUEMING LI

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OBJECTIVE: To obtain a full-time position of Mechanical Engineer/Thermal Engineer starting on December 2016

SUMMARY

- Exceptional skills in thermal measurement design and analysis, especially controls of thermal system and CFD simulation.
- More than 2 years' hands-on experience on HVAC system and strong background in heat transfer and fluid mechanics principles.
- Hands-on experience with Ansys (Fluent), SolidWorks, ProE, LabVIEW, Matlab and NI data acquisition system.
- Outstanding interpersonal communication and self-study skills, quick adaptation to new environment.

EDUCATION

- 08/14-12/16 **University of Illinois at Urbana-Champaign**, Champaign, IL GPA:3.86/4.00
- *M.S. in Mechanical Engineering*
- 09/10-06/14 **Zhejiang University**, Hangzhou, China GPA:3.92/4.00
- *B.S. in Energy and Environment Systems Engineering, Top 3%* 88.01/100
 - *Won 11 kinds of scholarships, two honor titles including outstanding graduates, and one national contest award*

EXPERIENCE

- 10/14-present **University of Illinois at Urbana-Champaign**, Champaign, IL, *Advisor: Prof. Predrag S. Hrnjak*
Research Assistant (Thesis: Controls of Flash Gas Bypass(FGB) System for Automobile Air Conditioning)
- Studied FGB for air conditioning system performance in dynamic load condition using electronic flow controls
 - Designed and rebuilt part of the facility and DAQ system (sensors & data logger)
 - Hands-on experience in building environmental chamber, pipelines, and choosing appropriate fan and blower
 - Designed PID controllers to control valves opening, leading to automatic controllable, high performance system
 - Focused on automatic control of valves in transient situation and discussed design options for one component
- 01/16-present **University of Illinois at Urbana-Champaign**, Champaign, IL
Teaching Assistant, ME 330 Engineering Materials, Mechanical Testing Instructional Laboratory, UIUC
- Supervised laboratory section of 16 undergraduate students in course Engineering Materials
 - Hands-on experience on tension and compression, hardness, fracture and impact testing as per ASTM standards
- 01/15-05/15 **CFD Modeling of Forced Cooling of Computer Chassis**, Champaign, IL
- Built up a model concerning the cooling of computer chassis by SolidWorks 3-D design
 - Calculated the CPU temperature and compared different heat sink configurations by thermo-fluid simulation using ANSYS(Fluent)
 - Evaluate the thermal performance of the cooling method of computer chassis and mechanical design of heat sink
- 10/12-09/13 **Tunnel Air Purification Device and Method based on Low-Temperature Plasma Technique**, China
- Designed a device (3D CAD design using SolidWorks) based on low-temperature plasma technique to reduce air pollutants such as PM, CO, NO_x, VOC_s, HC in tunnel
 - Manufactured transparent assembly and did experiments to verify its effectiveness
 - Reduced the cost in medium 3-km tunnel by 17% by economy analysis compared to existing ventilation method
 - Won **First Prize** (10/2055) in the 6th National University Student Contest on Energy Saving & Emission Reduction among 2,055 competitors from over 200 Chinese Universities
 - Published Chinese patent No. CN 103432901 A

SKILLS

Computer: Python, C++, MATLAB, LaTeX

Software: SolidWorks, Cero ProE, AutoCAD, LabVIEW, Abaqus, ANSYS(Fluent), Simulink

Main courses: Numerical Thermo-Fluid Mechanic (CFD), Thermal System Design, Heat Transfer, Fluid Mechanics, Multiphase Systems and Processes, Finite Element Analysis (FEA), Control Systems, Numerical Analysis, Controls of Mfg Systems