

Yunji Gu

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EXPERTISE

Extensive experience in CFD modeling and thermal management experiments of Data Center

EDUCATION

Georgia Institute of Technology, Atlanta, GA

Master of Science in Mechanical Engineering

Fall 2013 -- August 2015

Thesis: Investigation of Air Flow through Perforated Floor Tiles in Raised Floor Data Center

Georgia Institute of Technology, Atlanta, GA

Bachelor of Science in Mechanical Engineering GPA: 3.52/4.00 (High Honor)

Spring 2011 -- May 2013

Iowa State University, Ames, IA

Coursework in Mechanical Engineering

Spring 2009 -- Fall 2010

PROFESSIONAL EXPERIENCE

Graduate Research Assistant, Georgia Institute of Technology

Atlanta, GA

Energy Efficient Thermal Management of Data Center

Spring 2014 -- Present

Project: Investigation of Air Flow through Perforated Floor Tiles

- Resolve the tile geometry using CFD modeling to simulate the air flow through commercial perforated tiles
- Investigate downstream air flow delivery by using 2D particle image velocimetry (PIV) system
- Exam the cold aisle thermal field and hot air entrainment characteristics by using planer thermocouple grid

Undergraduate Research Assistant, Georgia Institute of Technology

Atlanta, GA

Computer Aided Simulation of Packaging Reliability

Fall 2012 -- Summer 2013

Project: Cu-Sn-Cu Micro-bump Microstructure Evolution and Reliability Analysis

- Built 3D models on ANSYS to simulate the strain distribution of Cu-Sn microstructure
 - Fabricated the Cu-Sn interconnections by using reflow oven, mold, and polisher
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SKILLS

Programming: MATLAB and C

Modeling: ANSYS Workbench, Fluent, Gambit, Autodesk Inventor, AutoCAD, SolidWorks, 6SigmaDC Room Lite

Machine Shop Tools/Processes: Mill, lathe, drill, polisher and CNC programming

Languages: Mandarin and English

WORKING EXPERIENCE

Lab Coordinator, Georgia Institute of Technology

Atlanta, GA

Project: Help Updating the Teaching Content of Mechanical Instructional Lab

Summer 2015

Design and fabricate a XY plotter driven by microcontroller/CNC system for undergraduate mechatronics lab

Graduate Teaching Assistant, Georgia Institute of Technology

Atlanta, GA

Course: Creative Decisions and Design

Fall 2013

Managed one section with 20 students and taught them basic knowledge in Mechanical Engineering through machining and mechatronics studios

ACTIVITIES

Conference, Energy-Smart Electronic Systems (ES2) Industrial Advisory Board Meeting

Arlington, TX

Research Projects Presenter

Fall 2014

Member of American Society of Mechanical Engineers (ASME)

Fall 2009 – Present