

# Ni, Wentao

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## EDUCATION

**B.E.** Mechanical Engineering May 2019 (expected)  
**University of Illinois at Urbana-Champaign**, IL, United States of America  
GPA: 3.62  
Technical GPA: 3.72

**Minor** Computer Science

### **Specialized Course Work:**

**Mechanical Engineering:** Mechanical Design I&II, System Dynamics, Heat Transfer, Fluid Dynamics

**Computer Science:** Data Structure, Data Mining, Interactive Computer Graphics, Computer Architecture, System Programming

## RESEARCH & WORK EXPERIENCE

**Undergraduate Research Assistant**, *Air Conditioning and Refrigeration Center* Fall 2017 – present

Participating in a project funded by the *National Science Foundation* (NSF) to work on:

### **Drainage of Condensate Retention between Fins on Horizontal Tube Using Wettability Management**

- Assist Graduate Researcher in the construction of experimental devices that measure the linear heat transfer coefficient of R134a oil -infused metal foams.
- Implemented LabView program to obtain experimental data.

**PhD Researcher Assistant**, *Department of Computer Science, University of Illinois at Urbana-Champaign* Summer 2018– present

Participating in a PhD student's research to work on:

### **Developing sampling methods of heterogeneous networks of large datasets**

- Extract and collect huge datasets for tentative sampling from online open sources.
- Write programming functions code for new concepts and features by Python libraries.
- Implemented algorithm in other papers on new datasets for control experiments.

**Mechanical Design Course Project** Spring 2018

Delivered an automaton prototype for Engineering Open House demonstration and a final product for robot race

### **Constructing an automaton that successfully travels 15 meters in a minute in the robot race**

- Analyzed force and dynamics system of walking mechanism by implementing MATLAB code.
- Built CAD model and animation by Creo for 3D printing and laser cut
- Participate in final assembly and welding of automaton parts

**Introduction to Computer Science Course Assistant** Spring 2016

- Attended to Students' Java programming or conceptual homework problems at office hour
- Explained concepts and reasoning of materials in class and helped with in-class assignment

## COMPUTER SKILLS

- Programming Languages: Python, C++, C, Java, JavaScript and MATLAB.
- Office Software: MS Office (Word, Excel, PowerPoint and Visio)
- CAD: Creo, SolidWorks and AutoCAD