


Haobo Zhao

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EDUCATION BACKGROUND

Southern Illinois University (SIUC)

Carbondale, IL

- Bachelor's degree in Aviation Technologies (Dual Degree Program with SAU) Expected May 2023
- GPA: 4.0/4.0
- Dean's list

Shenyang Aerospace University (SAU)

Shenyang, China

- Bachelor's degree in Flight Vehicle Propulsion Engineering, Expected June 2023
- GPA: 3.77/4.0
- **Scholarships:**
2021 China National Scholarship (1/300)
Three-time Comprehensive First Class Scholarship (Academic Performance), 2020&2021(1/50)

KEY COMPETENCIES

- Physics, math calculation, mathematical modeling
- Mechanic modeling (with professional software Such as CAD, Solid works, CATIA)
- Grasp LaTeX, Python

RESEARCH PROJECT

Power Allocation Planning in Time Trials (2022 MCM/ICM)

February 2022

Paper writer & programmer

- Developed the combined OmPD model to define the power curves for different types of riders
- Developed a ramp power output model and an anaerobic energy consumption model to determine how cyclists' power is distributed across different tracks

Business Plan: 21st Generation UAS System (Independent Project)

May 2022

- Proposed a new truck—based UAS dynamic network, extended UAS active radium
- Conducted dynamic transportation network optimization

Music Evolution: A Network Model of Influence (2021 MCM/ICM)

February 2021

Paper writer

- Developed music influence network, identified a spectrum of succession among popular music

Process Control and Toyota Way: Why SPC Is Not A Part of TPS (Independent Project) 2021.12

- Analyzed the history, progress and basic components of Toyota TPS quality control system
- Analyzed the control system developing direction in the new era

AWARDS

2021 First price in the grand final of iCAN International Contest of innovAtioN

2021 First Prize of Provincial Mathematical Modeling Competition(Liaoning)

2020 First Prize of National Mathematics Competition for College Students (non-mathematics majors)

2021 Second Prize of National Mathematics Competition for College Students (non-mathematics majors)

2021 Third prize in China CUMCM (Contemporary Undergraduate Mathematical Contest in Modeling)

2020 First prize of provincial physics experiment competition

2020 Second Prize in Asia Pacific Mathematical Contest in Modeling

ACTIVITIES

(2021-) *Global Science* Online Intern

(2020-2021) SIU Freshman assistant

(2019-2021) Director of Ministry of Technology In Student Union (SAU)