

Hongcheng Wu (Calvin Wu)

Beijing, China | calvin.hongcheng.wu@gmail.com | <https://github.com/CalWin5Wu>

EDUCATION

Beijing Academy

High School

Beijing, China

Expected May 2026

Relevant Coursework: AP Physics 1, AP Physics C: Mechanics, AP Physics C: Electricity and Magnetism, AP Calculus BC

Achievements and Awards

TOEFL: 104

SAT: 1420

The International Mathematical Modeling Challenge (IMMC): Special Entry Award for China

The American Mathematics Contest 12 (AMC 12): World Top 5%

Physics Unlimited Explorer Competition (PUEC): Honorable Mention

VEX Robotics Competition: Advanced to the top 16 in Division B of the VEX National Championship

研学论文-典型饮品在安徽徽州的价格歧视: 2024-2025学年中华文化寻根之旅, 徽州行课题一等奖

PROJECTS

The International Mathematical Modeling Challenge (IMMC)

Beijing, China

Team Lead

Summer 2024

- Conducted comparative analysis of several models, including building an ODE (ordinary differential equation) to express the change of concentration over time
- Used time and space based PDE (partial differential equation) model to solve a lake pollution control and prediction problem
- Led the team in solving real-world problems involving complex understanding and knowledge in a model-building manner

Physics Unlimited Explorer Competition (PUEC)

Online

Team Lead

Summer 2024

- Responsible for the calculation of magnetic and electric fields in the competition, and for the diagram drawing and the writing of the magnetic field portion of the paper
- Gained relevant professional knowledge in the competition and demonstrated my ability to use physical knowledge to solve practical problems

Research - 典型饮品在安徽徽州的价格歧视

Huizhou, China

Team Lead

Summer 2024

- Collaborated with teammates to study the differences of beverage prices in Huizhou and their contributing factors
- Responsible for collecting and analyzing data related to beverage prices, used statistical analysis methods and data visualization technology to deeply analyze the laws and causes of price fluctuations
- Demonstrated specific examples of price discrimination and consumer impact, contributing facts and data foundations to the research

LEADERSHIP AND PROFESSIONAL DEVELOPMENT

Beijing Middle School School of Engineering Physics (北京中学工程物理学院)

Beijing, China

Club President

Spring 2025 – Present

Vice Club President

Fall 2024 – Fall 2024

- Participating in team projects and technical practice; familiarizing myself with basic engineering and physics applications; constructing and testing the school's first turbojet engine model
- Assisting in managing a 10-person team, organizing and leading multiple engineering and physics experimental projects such as the rocket models display
- After being voted as the Club President, fully responsible for the club's operations, establishing the F1 in Schools department, expanding the innovation and development of the club's professional capabilities, and advertising the club within the school

VEX Robotics Competition

Shanghai, China

Team Lead

Fall 2024 – Present

- Leading a team of 5 people, as the captain and chief designer of the school team A
- Responsible for the design, construction and operation of the robot, ensuring the team's technical advantage in the competition, and personally operating the machine in the competition

- Designing the chassis of the machine for the school team A in the VEX 24-25 season, optimizing the suction ring system, and upgrading some detailed mechanical structures to ensure the competitiveness of our team

INTERESTS

Mechanical Engineering, Engineers, Formula One