#### Siddhant Srivastava

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### Objective

High school senior with a strong background in computer science, mathematics, and physics seeking internship experience to apply problem-solving and programming skills to real-world engineering projects. Other interests include film and biking.

## Education

2022-Current Interlake High School, Bellevue, Washington

**GPA:** 3.74

**SAT:** 1570

**Relevant Coursework:** IB Diploma (Physics HL, Math Analysis and Approaches HL, English Lang & Lit HL, Psychology SL, History SL, French B SL), AP Computer Science A, AP Physics 1 & 2, Linear Algebra, AP Chemistry, IB Film SL

Clubs: Robotics Club, Civil Engineering Club, Programming Club, Computer Vision Club

Experience		
Schoolhouse SAT	<ul><li>Learned to communicate with others effectively</li></ul>	2024-Present
Tutoring	<ul><li>Tutored a full 4-week SAT Bootcamp series</li></ul>	
(Volunteer)	<ul><li>Led a tutor onboarding session</li></ul>	
	<ul><li>800+ tutoring minutes</li></ul>	
Robotics Club	<ul><li>Strategy captain for school FRC team</li></ul>	2022-Present
	<ul><li>Member of the programming sub-team for four years</li></ul>	
	<ul><li>Competed at the international level</li></ul>	
Civil Engineering	<ul> <li>Co-founder and teaching director for school Civil</li> </ul>	2024-Present
Club	Engineering Club	
	<ul><li>Developed and taught lessons on the physics of core</li></ul>	
	engineering subjects to members	

### **Research Projects**

### Exploration of Optimization Techniques in Artificial Intelligence Microchip Design

- Comparative analysis of AI chip optimization in hardware, software, and algorithmic approaches
- Includes case studies of Google TPUs, Apple Neural Engine, and NVIDIA GPUs
- Investigated the interplay between high performance and energy sustainability in AI hardware
- Skills: Technical analysis, solution synthesis, ML model optimization techniques

#### Investigation of the Effect of Mass of an Object Falling in Water

- Designed a controlled experimental lab to model the principles of fluid dynamics
- Quantified effects of buoyancy through precise measurements and data analysis
- Skills: Experimental design, data acquisition and analysis

### Investigation of Cognitive Biases: The Effort Heuristic in Art Evaluation

- Conducted experiment to investigate the influence of perceived effort on aesthetic judgement
- Applied statistical analysis (Mann-Whitney U Test) to an ordinal dataset
- Skills: Experimental ethics with human participants, statistical analysis

# Recognition & Achievements

## Skills/Qualifications

- National Merit Scholarship Semifinalist
- USACO Silver
- AP Scholar with Distinction
- Inspirit Al Scholar
- Programming (C++, Java, Python)
- Research experience
- Problem solving
- Native English speaker
- Fluent in French (CEFR B2 Level equivalent)