

# HANSON SUN

*Student and Inquirer*

## CONTACT

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🌐 <https://hanson-sun.github.io/>

🏠 Richmond, BC

## EDUCATION

### IB DIPLOMA PROGRAMME

2018 - 2022

44/45 points

(Math, English, Physics HL,  
Chem, ITGS, Mandarin SL)

Richmond Secondary School,  
BC, CA

### BACHELOR OF SCIENCE

2022 - Present

University of British Columbia,  
BC, CA

### RELEVANT COURSES

CPSC 110: Program design

CPSC 121: Computation models

CPSC 210: Software design

## AWARDS

■ Governor General's  
Bronze Medal

■ Principals Honour Roll

■ Honours in COMC,  
Euclid, CSMC

## OTHER SKILLS

■ Mandarin/Cantonese

■ Google Suite

■ MS Office

■ Communication

■ Organization

■ Research

## ADDITIONAL PROJECTS

🐙 [github.com/Hanson-Sun](https://github.com/Hanson-Sun)

## ABOUT

Hanson Sun is a general science student with an interest in computer science. He is passionate about technology, education, and research. He enjoys cycling, learning new skills, and playing the saxophone in his free time.

## TECHNICAL SKILLS

Python 🐍

Java ☕

JavaScript 📄

HTML/CSS 📄

Racket 📄

Bootstrap 📄

Latex 📄

Git 📄

C++ 📄

Arduino 📄

Julia 📄

React 📄

## EXPERIENCES

### CO-FOUNDER OF MATH CONNECT

May 2020 - June 2022

- Planned, designed, and launched a free NPO, Math Connect
- Managed tutors, students, and classes
- Communicated with partners for support and cross-advertisement agreements
- Created and managed website, [mathconnect.ca](https://mathconnect.ca)

### PRESIDENT OF MATH CLUB

Jun 2020 - May 2022 (Highschool)

- Collaborated with the school math department to order, plan, advertise, and seat contests with around 90 students
- Worked with the school admin to collect fees and allocate funds of over \$600
- Gained sponsorships for the Euclid contest from the RHS alumni association

### UBC REX (UNDERGRADUATE RESEARCH PROGRAM)

Oct 2022 - present (University)

- Conduct bio-computing research under the guidance of a graduate professor
- Preparation to present at research conference MURC
- Create cellular automata and ODE models with Morpheus and Jupyter Notebook
- Research topic: A Step Forward in Understanding Skin Cancer: Modelling Keratinocyte Stem Cell Proliferation Regulated by p63 and c-MYC Proteins

## PROJECTS

### ANALYSIS OF 2D PHYSICS SIMULATIONS IN JAVASCRIPT

Feb 2020 - 2021

- A formal paper analyzing the implementation of a 2D JavaScript physics engine
- A step into the realm of computational physics, with more additions to come
- <https://github.com/Hanson-Sun/particle-physics-engine>

### DRAWING WITH SOUND

April 2022

- Drawing 2D images on an oscilloscope with sound and Fourier transformations
- A fun way to visualize images with sound and analog equipment
- <https://github.com/Hanson-Sun/Physics-Capstone>

### RENDERING 4D POLYGONS

Sept 2022

- An investigation on rendering 4D wireframe models in 3D space
- An extension of traditional 3D graphics rendering
- <https://github.com/Hanson-Sun/4d-rendering>