William Y. Wang

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EDUCATION

Cornell University
Arts and Sciences
Bachelor's Degree: Computer Science and Physics
May 2024

Pittsford Sutherland High School
Grad. June 2020
GPA: 96.92

PUBLICATIONS

W.Y. Wang and R. S. Craxton, "Pentagonal prism spherical hohlraums for OMEGA," **28**, 062703 (2021)

LANGUAGES

Java, Python, FORTRAN, OCaml, C, C++, MATLAB, Javascript, Swift, HTML

COURSEWORK

- C++ Programming
- Honors Object Oriented Programing and Data Structures
- Discrete Structures
- Functional Programming
- Computer System Organization and Programming
- Mechanics and Special Relativity
- Electricity and Magnetism
- Intro Bio: Comparative Physiology
- Multivariable Calculus
- Differential Equations
- Linear Algebra

AWARDS

- Schreiner STEM Scholarship
- Xerox Award for Innovation and Information Technology
- American Computer Science League 1st Individual in New York
- Maureen O'Donnell Oxford Classical Dictionary Award

WORK EXPERIENCE

Laboratory for Laser Energetics Jun 2019 – present
Project Assistant Rochester, NY

- Conducted research in fusion energetics and wrote viewfactor code to simulate indirect-drive target implosions in various hohlraum designs.
- Developed novel hohlraum design and published paper (first author) to *The Physics of Plasmas*.
- Presenter at the 62nd Annual Meetings of the APS Division of Plasma Physics (Session GO09).

Itai Cohen Laboratory (Cornell University) Feb 2021 – present
Undergraduate Researcher Ithaca, NY

- Developed both 2-D and 3-D computational models to study mechanical properties of articular cartilage and several lattice structures.
- Implemented conjugate gradient algorithms to find minimized energy state of networks.
- Studied and currently writing paper on polarized cartilage networks.

Cornell University CIS Course Staff August 2021 – present
Consultant/TA Ithaca, NY

- CS 2112: Honors Object Oriented Programming and Data Structures
- Facilitate lab session, hold weekly office hours, help design and grade assignments.

Clinical Cardiovascular Research Center Jun 2016 - Jan 2019
Software Developer Rochester, NY

- Developed several softwares at CCRC of University of Rochester
- QTClock: Developed Python program to plot a patient's heart QT interval data (obtained from ECG recordings) and the patient's intake drug concentration in a clock-like graph.
- Also developed an online calculator that assesses the absolute risk of life-threatening cardiac events in patients with long QT syndrome.

Summit Medical Group Arrhythmia Center Dec 2018 - Feb 2019
Website Design Rochester, NY

- Helped design a website for Dr. Jonathan Steinberg, which is currently hosted at Arrhythmia.org.

PROJECTS

Steer Calendar
Developed an iOS app written in Swift and using SQLite and Google Firebase. The app fetches information from teacher webpages, parses iCal data, and then displays assignments and other course content on students' devices.