

# SUNNY WONG

Brooklyn, NY • Sunny.wong200@gmail.com • 646-264-8922 • www.linkedin.com/in/sunnymwong

## Education

---

### Cornell University, College of Engineering

*Bachelor of Science in Engineering, expected May 2022*

Ithaca, NY

- Cumulative GPA: 3.70/4.3, earned Dean's list
- Major: Engineering Physics
- Member of the Ronald E. McNair Post-Baccalaureate Achievement Program
- Enrolled as a member of the Arthur O. Eve Higher Education Opportunity Program and Ryan Scholar

## Work Experience

---

### Learning Strategies Center at Cornell University

*(August 2019 – Present)*

*Physics Tutor for Undergraduate Students*

- Educated and guided students on problem solving techniques for physics questions from both electromagnetism and introductory mechanics courses through in-person and online tutoring
- Collaborated with both individual students and groups of students on problems to improve student learning
- Communicated ideas and physics concepts to students while offering personal support to actively engage with students in their learning
- Adapted to an online classroom setting and maintained a healthy learning environment for physics students

### Kourkoutis Electron Microscopy Group at Cornell University

*(September 2020 – Present)*

*Lab Researcher*

- Improved Python code used to analyze Scanning Transmission Electron Microscopy (STEM) images to identify the location of and characterize the misalignment of 2-D atomic layers in Nb<sub>3</sub>Br<sub>8</sub> crystals.
- Applied Fourier Analysis to filter for certain features within STEM images and performed phase analysis on the Fourier-filtered images
- Developed an understanding for image and signal processing techniques using Python code
- Designed individual research project to better understand the structure of MoTe<sub>2</sub> during temperature driven phase transitions

### Advanced Beam Lab at Colorado State University

*(June 2020 – August 2020)*

*Lab Researcher*

- Participated in the Research Experience for Undergraduates (REU) Program under Professor Jorge Rocca
- Automated the controls system for the high-intensity Titanium: Sapphire Laser at the Advanced Beam Laboratory
- Interfaced with National Instrument equipment to send and receive digital signals to and from stepper motors and Newport Power Meters to create a data acquisition loop using a LabVIEW GUI
- Developed a LabVIEW program that automatically saves and updates measurements from the Newport Power Meters onto a csv file as measurements run in real-time
- Programmed LabVIEW code that interacted with relay switches to produce on and off signals that control certain features of the laser system using digital signals

### Office of Academic Diversity Initiatives at Cornell University

*(June 2019 – December 2019)*

*Student Assistant and Receptionist*

- Informed students of resources regarding available specialized programs and diversity outreach
- Directed students towards advisors and provided resources such as laptop and book loaning
- Organized and maintained office space while interacting with office staff and students

## Activities and Programs

---

### Cornell Pre-freshman Program

*(June 2018 – August 2018)*

- Studied Engineering courses including Mathematics, Engineering Visualization, and Computer Science
- Received a GPA of 4.0/4.3 in summer courses, received Award for Superior Academic Achievement

## Skills

---

- Proficient in programs: Microsoft Word, Excel, Adobe Photoshop, and Adobe Illustrator
- Proficient in coding Python, Java, and LabVIEW