

Education:

Cornell University CALS

Expected May 2021

BS Biological Engineering

Skills:

Computer Languages:

- **Python** (Proficient)
- **MATLAB** (Proficient)
- **Java** (Proficient)
- **R** (Proficient)
- **Arduino** (Proficient)
- **HTML/CSS** (Familiar)
- **C** (Familiar)
- **OCaml** (Familiar)

Design:

• ImageJ • Adobe Illustrator • Vegas Pro 14.0 • VirtualDub • Avidemux

Interests:

- Orchestral Conducting • Piano
- Violin

Computer Science Coursework:

- Object-Oriented Programming & Data Structures
- Computer System Organization & Programming
- Operating Systems
- Introduction to Analysis of Algorithms
- Introduction to Computer Graphics
- Data Structures & Functional Programming
- Dynamic Models in Biology
- Intro to Computing using MATLAB
- Discrete Structures

Bioengineering Coursework:

- Computational Biology & Genetics
- Principles of Bioengineering
- Single & Multivariable Calculus
- Differential Equations
- Linear Algebra
- Fluid Mechanics
- Heat and Mass Transfer
- Thermodynamics

Software Projects:

Cornell University Biological Engineering Department

Jan'19 – Jul'19: Robotics Researcher

- Co-designed autonomous light-sensing robot using **Arduino** Mega 2560 microcontroller and Adafruit motor shield
- Implemented greedy sorting algorithm to maximize resource collection for the 2019 International ASABE Robotics Student Design Competition
- Won three out of five rounds competition rounds

Rutgers Center for Computational and Integrative Biology

May'18 – Aug'18: Research Experienced Undergraduate

- Enhanced mathematical model for starling birds by introducing shape parameter to mimic observations and cleaner UI in **MATLAB**
- Performed data mining on 32 videos by developing ImageJ plugins to analyze trends and compute velocity of information transfer within rising flock in **Java**
- Received Best Poster Presentation Award and presented at the Mathematical Biology Institute Capstone Conference

Stony Brook Garcia Center for Polymers

Jun'17 – Aug'17: Research Experienced Undergraduate

- Assessed motility of cellular and extracellular matrices of normal and cancerous ductal breast cells
- Initiated project between two separate labs while teaching three high school students methods of conducting research

Jun'15 – Aug'15: Materials Science Researcher

- Created and optimized molecularly-imprinted biosensors for detection of cancer biomarker and proteins in solution
- Modeled plot of biosensor sensibility using **Python** to determine line of best fit
- Presented and received Bronze Medal at International Sustainable World Project Olympiad

Club & Organization Affiliations:

Engineering Career Fair Team (ECaFT)

May'18 – Present: Tech Member

- Co-manages the Engineering Career Fair Team website by working in front-end development and presenting information for students and employers
- Managed as sole project manager for the spring career fair with 150 companies by assigning tasks such as ordering catering for events, booking rooms through filling registration forms, and table setup