Jeffery Tan
Email: jt334@duke.edu
Github: https://github.com/jeff-tan-2020/Image-Analysis-Bacterial-Cells

Education:

1. Duke University: Durham, NC (2020 - 2024). University GPA: 4.00
2. Carmel High School: Carmel, IN *(*2016 - 2020). High School GPA: 4.69

Experience:

1. Project STEM Summer Intern, IUPUI: May 2019 - August 2019
   PI: Nicholas Manicke, PhD **-** *Department of Chemistry & Chemical Biology, Purdue School of Science*
   Research Highlights:
   - Examined different solid-phase extraction procedures for the greatest enrichment of organophosphates from aqueous solution
   - Operated and analyzed data from an electrospray ionization mass spectrometer

2. Research Assistant, Duke University*:* September 2020 - January 2021
   Renata Garces-Perez, PhD **-***Department of Physics, Trinity College of Arts and Sciences*
   Research Highlights**:**
   - Fiji ImageJ analysis of bacterial cells
   - Developed a python GUI implementing OpenCV ellipse fitting for image analysis of bacterial cells

3. Kumon Teaching Assistant — *Member:* 2019 - 2020
   Job Description: Tutored students in math and reading on a biweekly basis

Awards/Honors:

1. Indiana Rising Star (2019)
2. Carmel High School Top Scholar
   i. Outstanding Achievement (Senior 2020)
   ii. Outstanding Achievement (Junior April 15, 2019)
   iii. Outstanding Achievement (Sophomore April 16, 2018)
   iv. Outstanding Achievement (Sophomore April 17, 2017)
3. 3rd Place USNCO Local Exam (2018)
4. Washington University Chemistry Tournament 1st Place Team (2017)

Coursework:

1. CHEM 201DL - Organic Chemistry I
2. CHEM 202D - Organic Chemistry II
3. COMPSCI 201 - Data Structures and Algorithms
4. BIO 208FS - Computing on the Genome
   Learned sequence analysis using Biopython and sequence alignment with MUSCLE
5. MGM 222FS - Genetics and Epigenetics
   Learned about various laboratory techniques including FISH, PCR, ChIP, and CRISPR gene editing
6. BIO 203L - Gateway to Biology: Molecular Biology, Genetics, and Evolution
7. STA 199L - Intro to Data Science
   Learned about how to use Rstudio for data analysis and data wrangling

Skills:

1. Proficiency in Java, Python, Fiji/ImageJ, and R
2. Speaking Proficiency in Mandarin Chinese
3. Practice Oriented Experience in Artificial Intelligence and Machine Learning

Activities:

1. Duke Focus Program: Genetics and Genomics
2. Blue Devils vs Cancer
3. ICCCI Dragon Dance Team Volunteer
4. Carmel UMC Food Pantry Volunteer

Examinations:

1. AP Biology: 5
2. AP Calculus BC: 5
3. AP Computer Science A: 5
4. AP Chemistry: 5
5. AP Physics E&M: 5
6. AP Statistics: 5
7. SAT Math II: 800
8. SAT Biology: 800
9. SAT Chemistry: 800