

John Ong

Curriculum Vitae • Salt Lake City, UT

EDUCATION

B.S. in Mathematics with a Statistics Emphasis, Computer Science Minor University of Utah	August 2021 – May 2025 Salt Lake City, UT
<ul style="list-style-type: none">GPA: 3.968/4.0Primary Coursework: Calculus I, Calculus II, Calculus III, Discrete Mathematics, Applied Statistics I, Foundations of Analysis, Intro to Probability, Linear Algebra	
Concurrent Enrollment Salt Lake Community College	August 2020 – May 2021 Salt Lake City, UT
<ul style="list-style-type: none">GPA: 4.0/4.0Primary Coursework: Intro to General Chemistry	
Diploma of Merit Taylorsville High School	August 2018 – June 2021 Taylorsville, UT
<ul style="list-style-type: none">GPA: 4.0/4.0Primary Coursework: AP Statistics, AP Calculus, AP English Language, AP US Government and Politics, AP Physics, Computer Programming, Computer Science Principles, Speech and Debate	

SKILLS

Web Development: HTML, CSS, JavaScript
Programming: Java, MATLAB, R, MIPS, Python
Previous Experience in Ubuntu Linux Distro and VMWare Workstation Player 16, 17
Modeling: LTSpice
Public Speaking and Presentation
Microsoft Office: Word, PowerPoint, Excel
LaTeX

EXPERIENCE

Station1 Frontiers Fellowship -- Fellow	<i>Jun 2023 – Present</i>
<ul style="list-style-type: none">A three-month, summer fellowship geared towards understanding the broader contexts and applications of STEM subjects for positive social change and to aid in gaining experience in technological research and development.Completed weekly readings, discussions, and exercises with all group participants.Delivered four major deliverables on completed with MDAnalysis that culminated in a capstone project.	
MDAnalysis -- Intern	<i>Jun 2023 – Present</i>
<ul style="list-style-type: none">Worked with mentors to increase interoperability between MDAnalysis and Protein Data Bank(PDB) format, and adding benchmark cases to MDAnalysis.	
University of Utah: Pre-REU	<i>Jun 2022 – Jun 2022</i>
<ul style="list-style-type: none">One month experience that introduces participants to the field of mathematical research.Studied the field of dynamical systems and its subsequent relation to intervals between any two numbers.Practiced deductive reasoning and proof writing through the natural discovery of lemmas and theorems.Completed a capstone project focused on the conversion between dynamical systems and their inverses.	

GRANTS AND AWARDS

Michael Zhao Memorial Scholarship	<i>Fall 2023 – Spring 2023</i>
<ul style="list-style-type: none">Awarded in memory of Michael Zhao, an outstanding undergraduate at the University of Utah who completed his honors degree in Mathematics in 2017.	

PROJECTS

Random Phrase Generator	<i>December 2022</i>
<ul style="list-style-type: none">In a pair programming style final project, my partner and I programmed a random phrase generator given a CFG file.	
Differentiability of Dynamical Systems	<i>June 2022</i>
<ul style="list-style-type: none">I worked with two others to investigate the impact of differentiation on the dynamical system and its conjugate.	
Tower Defense Game	<i>April 2022</i>

- I built an RTS-style tower defense game set at the Battle of Jena-Auerstedt, where you play Marshal Davout who oversees a small army corp against the might of the Prussian Army.