Joseph Li

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Education

August 2018 - Present
University of Maryland, College Park - *B.S. in Mathematics, B.S. in Computer Science*

- GPA: 3.944
- Expected graduation date: Fall 2021

Coursework

- Applied Stochastic Processes
- Advanced Calculus I/II
- Introduction to Abstract Algebra
- Introduction to Numerical Analysis I
- Combinatorics and Graph Theory
- Applied Harmonic Analysis
- Introduction to Statistical Thermodynamics
- Introduction to Computer Systems
- Organization of Programming Languages
- Design and Analysis of Computer Algorithms

Experience

September 2020 - December 2020
University of Maryland- TA for MATH402 Algebraic Structures

February 2020 - May 2020
University of Maryland- TA for STAT410 Introduction to Probability Theory

September 2019 - December 2019
University of Maryland- TA for MATH310 Introduction to Mathematical Proof

February 2019 - December 2019
University of Maryland- Undergraduate Research Assistant
FIRE: The First-Year Innovation & Research Experience
Engineering Biosensors Lab   Research Advisor: Dr. Catherine Spirito

- Performed selection of RNA aptamers against NasR protein, involved in antitermination of transcription under presence of nitrate in bacterial cells
- Constructed a chemostat to test microcompartment formation in pdu *E. coli* in continuous culture
- Assisted in the development of an aptamer-based biosensor for detection of *E. coli* in water samples using gold nanoparticles
- Wrote professional lab procedures and reports for operation of chemostat

February 2019 - May 2019
University of Maryland- TA for STAT410 Introduction to Probability Theory

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Skills

- LaTeX, Java, Matlab, R, C, HTML, MIPS Assembly, Ruby, OCaml