

# 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: 3.933
  - Expected graduation date: May 2021
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## Coursework

- Applied Stochastic Processes
  - Advanced Calculus I/II
  - Linear Algebra
  - Introduction to Abstract Algebra
  - Introduction to Thermodynamics and Statistical Mechanics
  - Object Oriented Programming I/II
  - Introduction to Computer Systems
  - Algorithms
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## Experience

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

February 2019 - May 2019

**University of Maryland**- TA for STAT410 Introduction to Probability Theory

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## Skills

- Proficiency with  $\text{\LaTeX}$ , Java, Matlab, R, C, HTML, MIPS Assembly
- Bacterial culture preparation, polymerase chain reaction, gel electrophoresis