# Joseph Li

(240)-813-0968 jli0108@terpmail.umd.edu https://terpconnect.umd.edu/~jli0108/

## Education

August 2018 - Present

University of Maryland, College Park - B.S. in Mathematics, B.S. in Computer Science

• GPA: 3.944

• Expected graduation date: May 2021

#### Coursework

• Applied Stochastic Processes

• Advanced Calculus I/II

• Linear Algebra

• Introduction to Abstract Algebra

• Introduction to Statistical Thermodynamics

• Object Oriented Programming I/II

• Introduction to Computer Systems

• Algorithms

# 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
- $\bullet$  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

## Skills

- LATEX, Java, Matlab, R, C, HTML, MIPS Assembly
- Bacterial culture preparation, polymerase chain reaction, gel electrophoresis