

# WILLIAM LIAO

COMPUTER SCIENCE @ UMD — FRESHMAN

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## EDUCATION

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### University of Maryland, College Park

College Park, MD (Aug. 2020 – May. 2024)

- Bachelor of Science - BS, Computer Science
- Banneker/Key (Full Ride) Scholarship Recipient
- Expected Completion: May 2024
- Relevant Coursework - Currently Taking: Object Oriented Programming II, Calculus II; Exempted by Exam: Objected Oriented Programming I

### Downingtown STEM Academy

Downingtown, PA (Aug. 2016 – Jun. 2020)

- International Baccalaureate Diploma, High School Diploma, 4.52/4.00
- Graduated Summa Cum Laude

## EXPERIENCE

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### nth Solutions, LLC

Software Developer Intern

Exton, PA (Jan. 2019 – Jul. 2020)

- Developed a user-facing dashboard using Java and JavaFX that facilitates communication of data between an IMU(Accelerometer, Gyroscope, Magnetometer) module and a computer. Dashboard is also responsible for configuring the module for data collection and processing the recorded data.
- Implemented a JavaFX Graph / Media Player into the dashboard that enables the visualization of IMU motion data synchronized with recorded video of IMU module's movement.

### Analytical Graphics, Inc.

Shadow

Exton, PA (Jun. 2019)

- Participated in a 21 hour career practicum to learn about the structure and functions of a software company.
- Investigated corporate software development strategy for scalability and managing large codebases.

## PROJECTS, ACTIVITIES, AND AWARDS

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### Spotted Lanternfly App

(Nov. 2018 – Jan. 2020)

- Developed an iOS mobile app in Swift for the PA Dept. of Agriculture that helps users manage Spotted Lanternflies (*Lycorma delicatula*), an invasive species in Southeastern Pennsylvania.
- Presented and received recognition for app at the 103rd Pennsylvania Farm Show.

### VEX Robotics

(Jun. 2017 – May 2019)

- Programmed autonomous movement of constructed robot in C to navigate a game field and stack cones while reacting to unplanned stimuli.
- Integrated macros to optimize robot control and movement.
- Qualified for PA State Competition in all two (2) years of participation.

### FBLA

(Apr. 2018)

- Demonstrated knowledge of Information Technology basics through an objective test. Concepts included fundamentals of computer hardware and software, internet communication, and networking concepts.
- Won 1st Place at State Level Competition (out of ~150 students).

### Function Flyer

(Mar. 2017 – May 2017)

- Developed an educational mobile game for Android using Java and Android Studio that teaches users the fundamentals of graphing.
- Presented app functionality, design, and documentation to a panel of judges.
- Won 1st Place for Programming at CCIU Unit of PA Computer Fair (out of ~20 teams).

## ADDITIONAL INFO.

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**Technical Skills** Python, Java/JavaFX, JavaScript, Microsoft Office, Git, L<sup>A</sup>T<sub>E</sub>X, Some HTML/CSS, C/C++, Swift  
**Languages** Conversational Fluency in Chinese (Mandarin), Limited Proficiency in Spanish  
**Test Scores** SAT: 1560 (Math: 800, EBRW: 760); AP Calculus AB: 5  
**Interests** Machine Learning, Data Analytics, Consumer Electronics, Design, Computer Software, Stationary