## **Mark Faust**

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## **EDUCATION**

# **Johns Hopkins University**

Baltimore, MD

Bachelor of Science—Computer Science & Physics (Dean's List - 3.94 GPA)

Expected May 2026

- Relevant Coursework: Data Structures, Intermediate Programming, AP Computer Science AB, Multivariable Calculus, Linear Algebra, AP Physics 1, AP Physics 2, Electricity & Magnetism, HEART: Intro to Neural Prostheses
- Honors: Bucknell Yo-Yo Award for Physics and Astronomy Nominee, Michael J. O'Donnell Mathematics Award, Society of Hispanic Professional Engineers High School Senior Scholarship, National AP Scholar with Distinction
- Interests: "Cheers" TV show, Golf, Soccer (goalie), Elton John, John Denver, the Jersey Shore, Skiing, Exploration

## **SKILLS**

- Programming Languages: Java, C/C++, Python (Numpy, MatPlotLib, Pandas), HTML, CSS, JavaScript, MySQL
- Software & Tools: IntelliJ, VSCode, Git, iGrasp, Figma, WiX, KIPR Wombat, Arduino, Bootstrap, phpMyAdmin
- Campus Involvement: Brain-Computer Interface Society Board, Association for Computing Machinery, ICPC Team

#### **PROJECTS**

## JHU Brain-Computer Interface Society

Baltimore, MD

Executive Board Member & Treasurer

August 2022 - Present

- Acquire funding from the JHU Biomedical Engineering department for our purchase of devices—Arduinos, power units, micro servos, breadboards, circuitry, electromyographic sensors, and more—used throughout the semester.
- Write programs that filter environment noise from sensors, accomplishing clear analog to digital signal conversion.
- Host workshops and lectures for the graduate/undergrad population to teach basic BCI setup techniques and practices.
- Contribute to the monthly newsletter sent out to the general body containing relevant neurotechnology news and info.
- Coordinate events where JHU researchers and companies like Neurable share recent advancements with students.

Vigilant-Fiesta Baltimore, MD Full-Stack Developer

Fall 2022

- Built a web application with 3 teammates which allows other developers to upload and scan their code repositories for unintentionally-exposed secret keys/passwords (vulnerabilities) using RegEx identification and entropy calculation.
- Implemented front-end user interface, employing HTML, CSS, and Bootstrap.
- Constructed the back-end database, writing in SQL and leveraging phpMyAdmin.
- Finished 5th out of 50 teams from across the tri-state area in the under-36 hour hackathon (HopHacks 2022).
- Devpost: devpost.com/software/vigilant-fiesta | Github: github.com/markfaust123/vigilant-fiesta

### KISS Institute of Practical Robotics Botball Team

New York, NY

Captain

September 2021 - June 2022

- Engineered functions in ANSI C which conducted analyses of input data from microelectronic hardware technology.
- Deployed motors, servos, IR sensors, and RGB computer vision cameras for autonomous environment adaptation.
- Executed 84 hours of program runtime and in-lab hardware-software integration with the KIPR Wombat controller.
- Simulated robot performance using KIPR Virtual Botball IDE throughout the 2-week competition prep period.
- Led our 4-person squad to placement in the 2022 KIPR Botball NY/NJ Regional Robotics Championship.

## **WORK EXPERIENCE**

Slice Calendar

Virtual, NY

Co-Founder

May 2022 - Present

- Joined forces with 4 international high school students from the USA, Turkey, Russia, and India to apply the LaunchX Entrepreneurship Program curriculum and build a Software as a Service startup from scratch to sales in just 5 weeks.
- Generated over \$300 in actual product sales and \$1,000 in contract guarantees and ensured our team OKRs were met.
- Analyzed financial projections with Google Sheets to predict our break-even point to be by June of 2025.
- Optimized UX and Marketing team's design and outreach processes, utilizing WiX, Google Slides, Google Forms, and Figma to build Proof of Concept and Minimum Viable Product wireframes for A/B Testing. (slicecalendar.com)

## **National Honor Society Loyola Chapter**

New York, NY

President

January 2020 - June 2022

- Tutored 15 students each week across Coding 101 (HTML/CSS), Robotics (C), and AP Computer Science AB (Java).
- Reinforced understandings of AP CS topics including recursion, sorting algorithms, inheritance, classes, and objects.
- Reviewed Robotics code to debug faulty subroutines, correct formatting issues, and reevaluate flawed logic.