

# Yash Kapoor

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## Education

**Graduation:**  
December 2021

University of Maryland, College Park, MD

### University Honors, Dean's List

*Bachelor of Science, Computer Engineering with Minor in Mathematics*

Computer Engineering GPA: 3.4

### Selected Coursework:

Major: Object-Oriented Programming, Discrete Structures, Algorithms, Organization of Programming Languages, Databases, Intro to Data Science, Signal Analysis, Circuits, Digital Logic Design

Minor: Probability & Statistics, Linear Algebra, Number Theory, Advanced Calculus

## Skills

**Languages:** Java, Python, C/C++, JavaScript, HTML/CSS, Git, Ruby, OCaml, PHP

**Frameworks:** Node.js, React.js, Bootstrap

**Software:** MATLAB, Android Studio, Processing 3, Arduino

## Projects

### UMD Table Tennis Club Web App

### | Personal Project

- Created a webapp to display Thursday Night League results with an admin page for data management using **Native JavaScript** for frontend, and **Microsoft Excel** files for storing data
- Website visited by 40+ people per week with frequent updates based on user feedback and necessity

### Small-C Interpreter

### | Academic Project

- Used **OCaml** to develop a lexer, parser, and interpreter for line-by-line interpretation of some operations of **Small-C**
- Interpreter handles simple mathematical operations as well as logical flow elements such as if-else statements and loops
- Currently supports primitive datatypes and common operations

### Social Media Usage and Perception of Data Distribution | Group Project

- Simulated a social media platform using an **Arduino Mega** to control 24 (physical) buttons to simultaneously collect and process data, and the **Arduino Serial library** to communicate data to **Processing 3** for analysis and visualization
- Gained greater insight on data collection and mining and their importance to data science roles

## Work History

Aug 2019 – March 2020

(Discontinued due to COVID-19)

### Teaching Assistant

*University of Maryland - College Park*

- Spearheading group tutoring sessions for Computer Science and Mathematics classes to help students struggling in areas such as object-oriented programming, data structures, calculus as well as linear algebra
- Guided at least 15 students per week to increase understanding, identify lagging skills, and correct weaknesses
- Most students displayed better grades over the course of the semester, with an average increase of half a letter grade

Aug 2017 –  
June 2018

### Computational Research Intern

*George Washington University*

- Conducted research, under Dr. Banaudha, regarding gene distribution and expression to ascertain causes of health issues in populations
- Analyzed genetic expressions to understand similarities in social behavior among dogs and humans
- Automated data aggregation to reduce data processing time by 40%

## Additional Info

### Secretary, UMD Table Tennis Club

- Responsible for communication between club members and making important announcements
- Altered club practices to make the clubroom a safe space by highly encouraging members to wear masks as early as half a month before universities went online due to COVID-19
- Managed the club roster and ensured all members fulfilled university-stipulated requirements

### Member, UMD Archery Club

- Weekly meetings for archers of all skill levels to come together and practice, learn and train for competitions
- Duties included helping inform new archers of proper technique and pick suitable equipment