# John "Jack" Cole

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#### **EDUCATION**

University of Maryland at College Park B.S. Computer Science (Data Science Concentration) 2018 – Present

Expected Graduation: May 2022 B.S. Mathematics Computer Science Departmental Honors GPA: 3.9 / 4.0

Dean's List - College of Computational, Dean's Scholarship Recipient

Mathematical, and Natural Sciences National AP Scholar

Coursework Highlights: CMSC 351 - Algorithms

• Systematic study of the complexity of some elementary algorithms related to sorting, graphs and trees, and combinatorics.

CMSC 320 - Introduction to Data Science

• Statistical data analysis, basic data mining and machine learning algorithms, large-scale data management, cloud computing, and information visualization.

ENES 269G - Grand Challenges in Engineering (Study Abroad Experience in Germany)

- Explore the grand challenges of engineering facing the modern world, including energy, urban infrastructure, health, security, the environment, and engineering the tools of discovery.
- Write a proposal for a UAV that would gather information on Mars.

## TECHNICAL SKILLS

Proficient: Java, C, Ruby, Python, R, Bash Intermediate: SQL, HTML/CSS, MATLAB

Beginner: Javascript

### RELEVANT WORK EXPERIENCE

*University of Maryland Department of Astronomy* 

January 2020 – Present

- Created a system for automating an archive of astrophysics source code.
- Adding functionality to the Astrophysics Source Code Library, including a "See Also" tag for each entry.
- Presenting a poster for my work at the 236th meeting of the American Astronomical Society.

University of Maryland Tutor

January 2019 - Present

- Tutor fellow students for success in STAT 400 Applied Probability and Statistics I
- Meet with STAT 400 professors to discuss course materials.
- Communicate mathematical concepts to other students.

Intern for Johns Hopkins University Applied Physics Laboratory, Force Projection Sector

September 2017 – May 2018

- Developed a tool to calculate the most fuel-efficient path for ships to take across the ocean.
- Used Java, Python, ArcGIS, QGIS
- Project left with further steps for future interns to complete.

## **EXTRACURRICULARS**

University of Maryland Mock Trial

2018 – Present

- Write and conduct direct and cross examinations of expert and character witnesses.
- Give opening and closing speeches in support of a case theory.
- Compete at intercollegiate tournaments throughout the year.

University of Maryland Linguistics Club

2018 - Present

- Listen to and present student-led talks on various topics in the field of linguistics, including natural language processing, sentence structure, and accents.
- Visit landmarks that are significant to the field of linguistics.

Mighty Sound of Maryland / Maryland Pep Band

2018 - Present

- Rehearse and perform halftime shows for home football / basketball games.
- Perform at on and off campus events including grand openings and open houses.