

# Maya Ravichandran

mr34@live.com • Website: [maravichandran.github.io](https://maravichandran.github.io)

## Education

**MSc in Advanced Computer Science – University of Oxford** – Oxford, UK (Oct. 2021 – Sept. 2022)

- Marshall Scholar

**B.S. in Computer Science – Rutgers University–New Brunswick** – New Brunswick, NJ (Sept. 2017 – May 2021)

- Presidential Scholar; Honors College; GPA: 3.98/4.00
- Coursework: *Graduate* – Massive Data Mining, Machine Learning; *Undergraduate* – Computational Biology, Artificial Intelligence, Data Structures, Algorithms, Biochemistry, Organic Chemistry

## Experience

**Software Engineering Intern, MongoDB** – New York, NY (Jun. 2021 – Aug. 2021)

- Utilized machine learning to predict whether a set of performance tests will have a performance regression given a set of code changes, achieving 0.881 accuracy, a 0.787 F1 score, and 0.909 ROC-AUC with passive-aggressive model
- Scraped commit and diff data from the mongodb/mongo git repository, combined data with a MongoDB performance dataset, and completed preprocessing and feature engineering using techniques such as one-hot encoding and random undersampling, utilizing Python, Pandas, and Scikit-learn

**Software Engineering Intern, MongoDB** – New York, NY (Jun. 2020 – Aug. 2020)

- Created a data pipeline within the Evergreen open-source continuous integration (CI) system that logs system metrics on the hosts running the CI tests, transforms them into structured data, and stores them in the data sink for access via a REST API using Go, enabling diagnosis of system failures via machine learning and data visualization

**Sales and Trading Summer Analyst, Bank of America Merrill Lynch** – New York, NY (Jun. 2019 – Aug. 2019)

- Proposed buying TWLO stock to Equity Swaps desk, and designed and priced hedges for the trade, including constructing a custom basket of equities and an options collar
- Proposed buying five-year swap spreads, based on Fed's Standing Repurchase Facility and termination of balance sheet unwinding, to Global Rates team

**Software Engineering Intern, Commvault** – Tinton Falls, NJ (Jul. 2018 – Aug. 2018)

- Created CSV reports of user activity data and inputted them into ARIMA prediction models using C++ to improve system availability for customers through intelligent scheduling of activities

**Research Intern, National Cancer Institute, National Institutes of Health** – Bethesda, MD (May 2018 – Jul. 2018)

- Identified structural variants in osteosarcoma genome sequences as targets for further research
- Improved accuracy of probabilistic framework for structural variant discovery by eliminating false positives utilizing results from logistic regression model, implemented in R

**Software Engineering Intern, Commvault** – Tinton Falls, NJ (Jun. 2017 – Aug. 2017)

- Designed and developed a dynamic web interface to improve CI/CD workflow for in-house software development
- Performed full-stack development using Angular, Bootstrap, HTML, CSS, Java, and MS SQL Server

## Skills

Python, R, Java, JavaScript, C++, C, Go, TypeScript, Angular, HTML, CSS, SQL, MongoDB

## Leadership

**Academic Affairs Chair, Rutgers University Student Assembly** (Apr. 2018 – Apr. 2021)

- Represented ~36,000 students on executive board of undergraduate student government and represented ~20,000 School of Arts and Sciences students as Senator to governing body of administrators, faculty, and students
- Led committee in creating survey, garnering ~13,000 student responses, and presenting findings to administration, resulting in reinstatement of pass/no-credit policy in response to COVID-19 pandemic for Fall 2020 – Spring 2021 semesters for all 48,000 undergraduates at Rutgers-Newark, New Brunswick, and Camden

**President, Rutgers Venture Capital (VC) Club** (Apr. 2018 – May 2021)

- Led the design and implementation of various educational/networking events, including a VC and entrepreneur speaker series, startup and investment pitch competitions, and VC internship panels
- Built partnerships with other departments and organizations and enhanced marketing efforts, resulting in tripled event attendance
- Led recruitment of 25 individuals to the club board and trained several directors to lead their own committees