Maya Ravichandran

mr34@live.com • Website: maravichandran.github.io

Education

Rutgers University–New Brunswick – New Brunswick, NJ (Sept. 2017 – May 2021)

- B.S. in Computer Science; Pre-medical track
- Honors College; Presidential Scholar; 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 (June 2020 – August 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, enabling diagnosis of system failures via machine learning and visualization of the system metric data

***Sales and Trading Summer Analyst*, Bank of America Merrill Lynch** – New York, NY (June 2019 – August 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 (July 2018 – August 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 – July 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 (June 2017 – August 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

***Research Intern*, Princeton University** – Princeton, NJ (July 2016 – January 2017)

- Investigated the impact of sulfate attack on the atomic structure of eco-friendly alkali-activated cement
- Analyzed eight million data points from Advanced Photon Source particle accelerator at Argonne National Laboratory
- Identified atomic bonds using Fourier transforms and X-Ray Pair Distribution Function analysis

Skills

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

Leadership

***Academic Affairs Chair*, Rutgers University Student Assembly** (April 2018 – Present)

- Representing ~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 ~50,000 undergraduates at Rutgers-Newark, New Brunswick, and Camden

***President*, Rutgers Venture Capital (VC) Club** (April 2018 – April 2019)

- Led the design and implementation of various educational/networking events, including a VC and entrepreneur speaker series, startup pitch competitions, and VC internship panels
- Led the 12-person executive board to build partnerships with other departments and organizations and enhance marketing efforts, resulting in tripled event attendance

Awards

- Marshall Scholar (December 2020)
- Finalist, Intel International Science and Engineering Fair (ISEF) (May 2017)