Rohit **Batra**

SOFTWARE ENGINEER

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Coursework

- CS 2102 - Discrete Mathematics
- CS 2501 - Software Development Essentials
- CS 2501 - Computer Organization & Architecture
- CS 2501 - Data Structures & Algorithms
- CS 3102 - Theory of Computation
- CS 3205 - HCI in Software Development
- CS 4620 - Compilers
- CS 4720 - Mobile Application Development

- APMA 3100 - Probability

Activities

- ACM
- HackCville
- Computer & Network Security Club

Honors

- National Merit Scholar

Skills

- Languages - C | C++ | Java | Python | Swift | CSS | HTML | JavaScript | SQL | LaTeX
- Tools - Git | Jupyter | NumPy | SciPy | Dask

Education

University of Virginia
Charlottesville, VA

B.S. IN COMPUTER SCIENCE
August 2019 - May 2022

- Honors: Dean's list

Experience

Arcturus Technologies
Leesburg, VA

SOFTWARE ENGINEER INTERN
June 2020 - August 2020

Janelia Research Campus
Ashburn, VA

SOFTWARE ENGINEER INTERN
June 2019 - August 2019

- Developed 13 Unique Object Masks for 3D Cell Volumes
- Utilized Scikit-image & SciPy Image Processing with Dask Parallelism to Process Larger than Memory Datasets
- Directly Contributed to More Efficient Machine Learning Pipeline
- Stack: Python, NumPy, Dask, Scikit-image, SciPy

Janelia Research Campus
Ashburn, VA

PROJECT INTERN
June 2018 - August 2018

- Developed Ground Truth Data
- Proofread Machine Learning Predictions & Implemented Corrections
- Project will Automate Organelle Segmentation & Allow for Data Mining of Large 3D Cell Volumes

Mathnasium
Leesburg, VA

LEAD HIGH SCHOOL INSTRUCTOR
January 2018 - June 2019

- Instructor for All Levels of Math up to Calculus
- Helped Students Build a Strong Math Foundation
- Worked with Students of All Ages

Projects

ImageFinder for Safari

INDIVIDUAL PROJECT

- Adds Reverse Image Search to Safari as Context Menu Options
- Published on the Mac App Store: 500+ Downloads
- Stack: Swift + JavaScript

NCAA Tournament Simulator

INDIVIDUAL PROJECT

- Developed an NCAA Tournament Simulator
- 3 Unique Simulation Strategies Based on ELO Ratings
- Stack: Java + JSON

Machine Learning Research

GROUP RESEARCH

- Research Concerning the Performance of Different Machine Learning Algorithms with Respect to Task Efficiency & Accuracy
- 3 Algorithms Compared Across 3 Unique Tasks
- Gathered Statistically Significant Results Regarding Situational Performance of Different Algorithms