Aarav Modi

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EDUCATION

Rutgers University   **New Brunswick, NJ**
B.S in Computer Science & Business Analytics IT   *May 2025*
- **GPA:** 3.96 / 4.0
- **Activities:** Mobile Application Development Club, Quantitative Finance Club, Dean's List
- **Relevant Coursework:** Data Structures, Computer Architecture, Software Methodology, Design & Analysis of Computer Algorithms, Principles of Programming Languages, Linear Algebra, Discrete Mathematics

WORK & LEADERSHIP EXPERIENCE

Lockheed Martin   **Moorestown, NJ**
Software Engineer Intern   *June 2023 – Present*
- Utilized **Perl** script to convert 50+ code repositories from **Visual SourceSafe** to **CVS** to **Git**
- Configured **batch** file & **options** file to pass filesystem path parameters and target directories for git conversion
- Leading development of mBot Robot navigation + autonomous scanning to later display mission data on **GUI**
- Implemented ComboBox action listener feature on ID Simulator Program GUI using **Java Swing** & **NetBeans**

National Basketball Association   **New York, NY**
Software Engineer Intern   *June 2022 – August 2022*
- Developed **lock screen widget UI** for NBA iOS App to display live game status using **Swift** & **Xcode**
- Updated **JSON** schemas to accommodate **API** updates for 5+ game cards and models (ex. articleVodCard)
- Worked with QA engineers to resolve 75+ bugs in various areas of app (ex. For You Feed, Scores Tab, Watch Tab)
- Performed manual beta testing for multiple digital products and devices through **TestFlight**

Rutgers Mobile App Development Club   **New Brunswick, NJ**
Director of External Relations   *April 2023 – Present*
- Developed + maintained corporate network of 25+ Fortune 500 companies to host info sessions & recruiting events

PROJECTS

One Shot Learning Algorithm   *October 2022 – November 2022*
- **C** application using training data set to learn weights for a set of house attributes, to later apply those weights to set of input data to calculate prices for houses
- Implements **Gauss-Jordan elimination** to find and manipulate inverses of matrices with row operations

Huffman Coding Algorithm   *March 2022 – April 2022*
- **Java** application employing a **lossless data compression** algorithm to encode/decode files
- Utilized **binary search trees** to efficiently reduce file size by accounting for character occurrence frequency in input file and ASCII value memory cost
- Achieved $O(n \log(n))$ run time while reducing file size up to 70% in test cases

Prerequisite Checker   *April 2022 – May 2022*
- **Java** program allowing users to input courses in a syllabus structure to assist with scheduling
- Programmatically informs students about eligibility for a particular course and aids them by providing a sample course schedule for following semesters to satisfy prerequisites
- Employed **hash tables** (to allow $O(1)$ search time), **priority queues** and **linked lists** to search for 20+ courses and mimic the Rutgers computer science syllabus structure

SKILLS, LANGUAGES & INTERESTS

Languages: Java, Swift, C, C++, Python, HTML, CSS, React.js, Node.js, Perl
Technical Skills: AWS Cloud Practitioner, Git, Object Oriented Programming, Agile, VS Code, Postman
Interests: Tennis (High school County Champion), Ukulele, Garba, Celtics, Harry Potter, Cricket