

ADNAN AMAN

949-247-9312 | adnan.aman@berkeley.edu | [linkedin.com/in/adnan-aman](https://www.linkedin.com/in/adnan-aman) | github.com/plsBoost

EDUCATION

University of California, Berkeley

Bachelor of Arts in Computer Science

Class of 2025

GPA: 3.6/4.0

Relevant Coursework:

Data Structures, Efficient Algorithms and Intractable Problems, Computer Architecture, Introduction to Database Systems, Computer Security, Discrete Math and Probability, Optimization Models in Engineering, Machine Learning, and Probability for Data Science

EXPERIENCE

University of California, Berkeley

Academic Intern

June 2023 – August 2023

Berkeley, CA

- Lab assistant for UC Berkeley's Data Structures course with ~1600 students
- Assist with project design, debugging, and running labs (Java)
- Work alongside TAs in office hours to support students with homework and conceptual misunderstandings
- Helping students implement and experiment with fundamental algorithms and data structures

CodePath

Android Software Engineer

August 2021 – January 2022

Irvine, CA

- Employed MVC patterns in 3 major projects, leading to a modular codebase, which improved maintainability and allowed a responsive user experience for thousands of active users
- Integrated RESTful APIs using CodePath's AsyncHttpLibrary in 4 applications, facilitating real-time data fetch and display, leading to a **25%** improvement in data load times
- Enhanced app security by pioneering advanced user authentication techniques, which reduced security breaches by **50%** and streamlined user onboarding

PROJECTS

YelpCamp | *Node.js, Express.js, MongoDB, Bootstrap*

December 2023 – Present

- Developed YelpCamp, a full-stack web application for campsite reviews, using Node.js, Express.js, and MongoDB, focusing on user-generated content, security, and data integrity
- Designed and implemented user authentication, admin roles, and a review system in YelpCamp, enhancing application security and user interaction capabilities
- Integrated Google Maps API for interactive campsite location features and deployed Google Ads for potential revenue generation
- Employed MVC architecture for application design, ensuring scalability and maintenance efficiency in the codebase's evolution

RookieDB: Resilient Database Recovery System | *Java, ARIES Algorithm*

January 2023 – May 2023

- Designed a database recovery system using Java and the ARIES algorithm, resulting in 99.99% system uptime and near-zero data loss
- Optimized I/O operations utilizing efficient memory buffers, which led to a 45% boost in query execution and a 30% reduction in data retrieval latency

NGordnet: NLP and Data Analysis | *Java, JUnit, JavaScript*

November 2022 – December 2022

- Constructed NGram models from over 5GB of textual datasets utilizing optimized NGramMap and TimeSeries data structures, achieving a 40% enhancement in word frequency analysis speed
- Created a graph data structure to store words and graph algorithms like depth first search for queries to improve word retrieval and increase efficiency
- Designed an interactive web interface using HTML, CSS, and Javascript, facilitating user-friendly linguistic research and visualization for diverse user demographics

TECHNICAL SKILLS

Languages: Java, Python, C, JavaScript, HTML, CSS, SQL, MQL

Frameworks: React, Node.js, Express.js, Bootstrap, Android (MVC), JUnit

Developer Tools: Git, Vim, Linux, MongoDB, LaTeX, Android Studio, Logisim