

# Shreyaan Arora

(303)-859-8017 | shreyaan.arora@colorado.edu | US Citizen

<https://www.linkedin.com/in/shreyaan-arora/>

## EDUCATION

**University of Colorado at Boulder**, Boulder, CO

August 2019 – May 2023

Bachelor of Science in Computer Science with a Minor in Business

*Relevant Coursework:* Data Structures, Computer Systems, Operating Systems, Linux Systems, Algorithms, Management, AI, OOP, and HCI

*Awards/Certifications:* Deans List Student, Eagle Scout – Boy Scouts of America, Java Certification – Villanova University

## SKILLS/INTERESTS

*Languages/Technologies:* C++, C, Swift, C#/.NET, Python, HTML/CSS, Java, JavaScript, React, SQL & NoSQL DBs, ADA, and Kotlin

*Tools:* Git, Jira, Confluence, NodeJS, Docker, Flask, Postman, REST, Eclipse, Xcode, VS Code, AWS, Slack, Azure, and Tanzu

*Interests:* Bollywood, Skiing, Programming, Technology & Electronics, Car Modification & Tuning, Music, and Traveling

## PROJECTS

### **µHPC Study**

April 2023

- Conducted a study on performance of Raspberry Pi micro-computer clusters' for µHPC tasks.
- Set up and benchmarked machines running a custom parallelized Python Fourier transform, compared three different operating systems' for performance, demonstrated significant speedup in parallel execution using µHPC with Arch Linux.

### **LetsTalk – AR Group Chat iOS Application**

Nov 2022

- Designed, co-developed, and tested a novel group messaging AR focused mobile iOS Application.
- Resulted in a unique immersive group chat experience leveraging Swift UI, Cocoa Pods, AR Kit, and Firebase.

### **Data Structures Efficiency Study**

April 2020

- Implemented custom Binary Search Tree, Linked List, and Hash Table in C++ for USPS data sifting run-time scenarios.
- Observed approx. 400% speed increase in searches using a Hash Table (w/Linked List Chaining Collision Resolution).
- Coauthored and presented a paper regarding the optimal data structure for large package dataset sifting and processing.

## WORK EXPERIENCE

**Lockheed Martin Corporation**, Colorado Springs, CO

August 2023 - Present

*Software Engineer*

- Developed various features and support tools for SBIRS/OPIR ISIM on LM Space's ISIM team
  - Developed ISIM features such as Active Ports Display, COMs State Display Color Coding, and Simulator Visualization's Command parameters auto-population using Java.
  - Transitioned legacy C++ backend to Java for satellite/simulator hex command generation, including command validation, database-wide command generation, etc.
  - Developed tools for interpreting vehicle reported health and telemetry data.

**Lockheed Martin Corporation**, Littleton, CO

June 2022 – August 2022

*Systems Integration Intern*

- Conducted a full business need analysis and problem identification, presented detailed plan and scope for a universal alert/messaging microservice.
- Designed, developed, tested, and deployed an end-to-end universal Slack Messaging Microservice using Slack APIs.
- The final microservice, was implemented as a Python-based Flask app in a Docker container and deployed on VMware Tanzu (PCF) to enable applications to receive live backend alerts through HTTP POST requests.

**Apple Inc.**, Boulder, CO

October 2021 – February 2022

*Specialist*

- Acquired comprehensive knowledge of the Apple product mix and maintained a high level of technical expertise in Apple hardware/software. Enabling informed and enhanced customer interactions, refining sales skills to provide solutions for both general customers and businesses/professionals.

**University of Colorado at Boulder | Computer Science Dept.**, Boulder, CO

January 2021 – May 2023

*Course Assistant*

- Assisted, taught, and guided students in Data Structures and Database Systems courses with related computer science coursework/material.
- Gained deeper understanding of course contents and developed tactical communication with effective training/teaching skills.

**Wide Open West Inc.**, Englewood, CO

June 2017/18 - August 2017/18

*Software Development Intern & Systems Analyst Intern*

- Created and reviewed "User Stories" in Atlassian Jira and handled various technical intern tasks.
- Sub-tasks included revision of algorithms, software & hardware architecture, and ensuring maximum efficiency. Also assisted with critical documentation and presentation of systematic discrepancies alongside relevant code reviews.
- Designed, developed, and deployed a full stack large internal dictionary application.