# Varun Venna

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#### **SUMMARY**

Passionate computer science student experienced in data structures and algorithms with a strong understanding of software engineering principles. Pursuing an internship to apply and elevate software engineering skills. Proven ability to excel both independently and as part of a team.

#### **EDUCATION**

### **UCLA**

Bachelor of Engineering

Major in Computer Science; Graduation year: 2025

Relevant Coursework: Computer Organization, Data Structures and Algorithms, Software Construction Laboratory, Design of Digital Systems, Operating Systems

### **PROJECTS**

#### Slide

- Created a dynamic web app using the MERN stack (MongoDB, Express.js, React, Node.js), libraries such as Chakra UI and React Native, and Git for version control.
- Implemented features such as user authentication, event creation, user matching, and a leaderboard via API calls, fetch calls, and controller functions.
- Employed berypt for enhanced security, salting passwords with extra bytes to deter hackers and hashing them before database storage.

### NetPhlix (C++)

- Designed and implemented movie recommendation system utilizing a database with over 100,000 titles and users' watch history
- Created sophisticated and time efficient algorithms in order to be able to quickly analyze user watch history and recommend movies, resulting in a 35% increase in speed
- Used a diverse range of data structures and efficient algorithms, such as trees, hash tables, bubble sort, and merge sort, to significantly enhance the efficiency of the recommendation system

#### TicTacToe AI Game (Java)

- Developed a TicTacToe game with an integrated AI opponent capable of making strategic moves
- Used Java Swing for an aesthetic GUI with dynamic board updates and Java Thread for managing game state and loop
- Utilized techniques such as alpha-beta pruning to enhance AI's ability to explore and evaluate possible moves

# **WORK EXPERIENCE**

## AVOLTA (SWE Internship)

October 2023 - February 2024

- Established and maintained routing framework with Flask and SQL for a mobile vehicle monitoring app while enhancing security with a bcrypt hashing function and parametrized queries
- Collaborated in a small team to develop functionality and security for password change/reset, data accesses, login, register user, etc.

## ASUCLA (Customer Service Representative)

January 2023 - September 2023

- Demonstrated exceptional customer service, resulting in a 20% increase in customer loyalty
- Organized and maintained merchandise displays, contributing to a 10% boost in product sales

### **ACTIVITIES**

### ACM AI(Advanced Track)

Nov 2022 - Present

- Active member of ACM AI, attending every meeting and further increasing knowledge of AI
- Helping a research team give machines the gift of sight via ML and AI

### Bruin Hindus(Board Member)

Sep 2022 - Present

• Avid volunteer and board member of Bruin Hindus. Helped many activities take place such as Bruin Bhangra, Diwali celebrations, and Holi celebrations in various locations around LA.

## **ADDITIONAL**

Technical Skills: C/C++, CSS, HTML, Java, JavaScript, Lisp, MATLAB, Python, React, SQL

Soft Skills: People skills, Time management, Fast learner, Leadership experience, Critical thinking, Flexible, Multitasker

Languages: Fluent in English; Conversational Proficiency in Telugu, Spanish

Certifications: Certified in Lean Six Sigma, Microsoft Excel, Microsoft Word, PowerPoint, 3rd Level Black Belt, Certified Sensei