# PRANAVA SAI MAGANTI

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Ames, IA linkedin.com/in/pranava7 Portfolio

#### **EDUCATION**

#### BS Computer Science | Iowa State University | CGPA: 3.75

2022 - 2026

Related coursework includes Data Structures, Object -Oriented Programming, Python Programming and Discrete Computational Structures. Currently enrolled in Construction of User Interfaces, Software Development Practices, and Computer Architecture

## **EXPERIENCE**

#### **Undergraduate Teaching Assistant**

**ISU Department of Computer Science** 

2023 - Present

Led weekly office hours and labs for 25+ students, debugging in Python and Object-Oriented Programming in Java, homework assistance. Provided one-on-one guidance during lab sessions, enhancing their programming skills and deepening their understanding of key concepts thereby offering personalized guidance on coding concepts and problem-solving techniques to bolster their grasp of Python and Java programming.

**Tutor & Supplemental Instruction Leader** 

**Academic Success Centre** 

Jan 2023 - Dec 2023

I provided academic support to groups of undergraduate students taking General Chemistry courses, fostering a collaborative learning environment by clarifying complex topics and guided problem-solving with regular feedback sessions.

## **PROJECTS**

#### **Dungeon Crawl: A Python Based Terminal Combat Game**

**Nov 2022** 

This game features turn-based combat, resource management, and dungeon exploration. Highlights include intricate game mechanics, strategic player choices, and immersive narrative elements in a terminal-based interface.

#### CommandTune: A Python Based Terminal Playlist Player

**Dec 2022** 

This interactive application enables users to manage and play songs from a command-line interface. Features include song selection, pause, replay, and playlist navigation, emphasizing proficiency in Python and user-friendly design in a non-graphical environment.

Interactive Puzzle Game April 2023

Developed a Java project involving a graphical user interface (GUI) to create a puzzle game akin to 2248. Implemented core logic including grid management, tile manipulation, and game state handling. Used Java's features like arrays, loops, and object-oriented programming to ensure smooth gameplay. Rigorously tested the functionality with unit tests, ensuring reliability and accuracy. Project emphasized individual coding proficiency, problem-solving skills, and adherence to specifications. No reliance on external libraries, solely focused on Java development.

#### Archive Message Reconstruction: A Java Based Console Message Decoder

Nov 2023

Implemented a terminal-based program utilizing binary tree data structures to read and process file contents. The application constructs a binary tree to organize data and adeptly decodes and reveals hidden messages on the console.

Personal Portfolio Jan 2024

Designed and developed a personal portfolio website using HTML and CSS. The portfolio showcases professional achievements, skills, and projects in a visually appealing layout. Employed CSS for styling and responsiveness, ensuring optimal viewing across devices. Incorporated interactive elements for enhanced user engagement. This project demonstrates proficiency in front-end web development, emphasizing design aesthetics and usability.

RiffRadar Jan 2024 – May 2024

An Android app designed to streamline concert ticket purchasing and event planning. With its user-friendly interface, users can easily discover upcoming concerts, purchase tickets, and organize their concert schedule efficiently. RiffRadar revolutionizes the way users engage with live music events, providing a seamless platform for concert discovery and ticket management.

#### CineScope: Multi-Lingual Movie Recommendations

Jan 2024 - May 2024

A dynamic website crafted with HTML, CSS, and JavaScript, dedicated to offering unparalleled movie recommendations across multiple languages including English, Hindi, Telugu, Tamil, Kannada, and Malayalam. Covering the cinematic spectrum from 2001 to 2024, the platform selects the finest film from each year, ensuring a diverse and enriching viewing experience for users. Its intuitive interface and sophisticated recommendation engine empower users to explore and discover cinematic gems tailored to their preferences. CineScope redefines the way audiences engage with cinema, bridging language barriers to unite movie enthusiasts in a global cinematic journey.

## **SKILLS**

- Programming Languages: Python, Java, HTML, CSS, JavaScript
- Technical Proficiency: Object Oriented Programming, Data Structures, Android App Development
- Soft Skills: Communication, Interpersonal Skills, Leadership, Teamwork, Problem Solving, Analytical & Critical Thinking

## **CERTIFICATIONS**

Coursera - Google Cybersecurity

Dec 2023 - Present

Currently enrolled in a comprehensive Cybersecurity course focused on modern industry practices and principles. Gaining handson experience in Python and SQL for security applications, alongside developing a deeper understanding of network security, threat analysis, and cyber defense strategies.