NAVEEN PRABAKAR
Hoffman Estates, IL | 847-962-0478 | nvnprabakar@gmail.com | LinkedIn | github.com | Personal Webpage

SUMMARY

I am a third-year Computer Science major at Iowa State University, passionate about backend development and databases. In addition to my studies, I serve as the lead Computer Science tutor at Iowa State, where I provide guidance on up to six core courses, including Data Structures & Algorithms, Object Oriented Programming, Computer Architecture.

EDUCATION

Iowa State University, Ames, IA — Expected Graduation May 2026

- Bachelor of science in Computer Science — GPA: 3.79/4.00
- Relevant Coursework: Data structures, Algorithms, Database Management Systems, Object Oriented Programming, Computer Architecture, Discrete Mathematics
- Awards: Dean's List Jan 2023-Current; Top 2% academic ranking Fall 2022

WORK EXPERIENCE

Iowa State University Help Room, Lead Computer Science Tutor, Ames, Iowa — 08/2024-Current

- Will lead and orchestrated small group tutoring's of 4-5 people
- Will tutor six different courses: Data Structures, object-oriented programming, Python, and Discrete Mathematics, Computer architecture, Algorithms providing flexibility and range to clients

Iowa State University Help Room, Computer Science Tutor, Ames, Iowa — 08/2023-05/2024

- Supported over 15-20 students in understanding and implementing essential data structures such as arrays, linked lists, stacks, queues, and binary trees, resulting in a 10-15% improvement in their exam performance.
- Assisted more than 30 students in mastering object-oriented programming in Java, leading to a 10-20% increase in their project completion rates
- Guided over 20 students through fundamental programming concepts and problem-solving techniques in Python, resulting in a 20% improvement in their assignment scores.

PROJECTS

Discord Trivia Bot — 07/2024-08/2024

- Engineered a highly accurate Python Discord bot using Discord API for handling trivia quizzes with score tracking, leaderboard features, and multi-server support; achieved 99% accuracy and increased user engagement by 10-15**%**.
- Utilized Docker for containerization to ensure continuous operation with minimal downtime
- Integrated MySQL database to store and manage user data, ensuring reliable and scalable data handling; stored and retrieved quiz questions, ensuring organized data management and efficient question extraction

Coding Journal System — 06/2024-07/2024

- Created a Python terminal-based program that efficiently stored user data entries into a MySQL database, categorized by user input; improved data retrieval speed by 15-20%
- Enabled user-driven modification of data entries through customized insert statements, enhancing user experience with greater accessibility and flexibility
- Implemented grammar and spelling APIs to create an automatic spell and grammar checker for user entries to ensure grammatical accuracy, improving readability by 5-10%

Machine Code Translator — 03/2024-04/2024

- Developed a comprehensive Java-based system for decoding machine code into LEGv8 assembly instructions. Utilized bit manipulation techniques to accurately interpret and represent various instruction formats
- Constructed a class to manage and manipulate 32-bit binary numbers, extracting specific components like register identifiers, addresses, and immediate values
- Modeled a class to read binary files, parse 32-bit instructions, and convert them into readable assembly language format. Incorporated label management and conditional branching to ensuring 95% accuracy

TECHNICAL SKILLS

- Computer Languages: Python, Java, C#, SQL, HTML, CSS, LEGv8 Assembly
- Frameworks/libraries, Tools: Git, GitHub, VS code, Eclipse, Linux, Open AI, Docker, MySQL, Neo4j, Junit, Shell