ADITYA PRAKASH

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EDUCATION

Emory University 2023 - 2025

Master of Science in Computer Science

Atlanta, GA

Institute of Engineering & Technology, Devi Ahilya University

2019 - 2023 Indore, MP

Bachelor of Engineering in Computer Engineering

• Courses: Computer Programming in C++, Data Structures, Design and Analysis of Algorithms, Artificial Intelligence

• GPA: 8.68/10; Class Rank: 3/150; Graduated summa cum laude

WORK EXPERIENCE

Rakuten Symphony Jan 2023 - May 2023

Software Development Intern

Indore, MP

- Spearheaded the development of the algorithmic backbone of the automated network predictor and manager. Wrote **50+ algorithms** for automation of network capacity management, resulting in a **40% reduction** in manual management efforts and a **60% improvement** in network reliability.
- Facilitated database connectivity with Ubuntu through Docker, implementing automation and easy setup of the code base via shell scripts. Successfully migrated from OracleDB to MySQL, which allowed for seamless integration with Rakuten's existing ecosystems. Additionally, switching to an open-source DB saved the company over \$100,000 in expenses.
- Debugged C++ code, resolving compilation issues and **reducing error rates by 15%**. Developed Python scripts for dummy input generation and database queries, resulting in a **30% reduction in execution time**.

workattech Mar 2022 - Jun 2022

Software Development Intern

Indore, MP

- Developed the user profile page for **over 50,000 users** with features like problem distribution, rank-card, progress bars, and a heat map of past submissions. Created an accompanying resume generator that can produce a concise 1-page resume from the coding profile, including language proficiency, past positions, and education.
- Programmed a problem bookmarking system to filter **300+ problems across 4 difficulties and 14 topics**. Designed a **smart problem recommender** to list similar problems for correct submission, and simpler problems for incorrect ones.
- Built a comprehensive compensation comparison page that allowed employees to compare their salaries and benefits
 against industry standards and company benchmarks. The tool was used by 100,000+ users to accurately compare
 compensations, facts and figures, and hiring trends for over 25 companies.

EduMetaMar 2021 - Feb 2022

Software Development Intern

Indore, MP

- Engineered a school management software for managing day-to-day school activities. Scaled for use by **over 3,000 users**. Provides features such as multiple authentications, fee payment, parent-teacher meetings, attendance, etc.
- Designed and developed a full-stack website and a dashboard for admins. Pushed updates to **improve performance by** 50% over 3 months.
- Streamlined the admission form validation process with JavaScript scripts, resulting in a 100% reduction in erroneous form entries and saving the institute more than \$50,000 in expenses and over 30 years of administrative time.

PROJECTS

Sorting Visualizer: Developed a JavaScript software for educators and students alike to visualize and explain sorting algorithms like Merge Sort, Bubble Sort, Quick Sort, etc. It has been used **over 1,500 times**.

Lane Line Detection: Built a Python program for safer autonomous vehicles. The application leverages OpenCV and detects lane lines on roads with over 95% accuracy.

TEACHING EXPERIENCE

Swati Jain College (Affiliated to DAVV, Indore)

Aug, 2022 - May 2023 **Teaching Assistant** Indore, MP

• Taught courses like Data Structures and Algorithms, Programming in C/C++, and Software Engineering to 50+ undergraduate students.

• Mentored 3 groups of 5 students in Machine Learning and Full-Stack Development projects. Led the design and development of "Hospital Administration and Insurance" and "Shopping-cart Comparison" mobile apps.

RESEARCH

Prakash, A., Prakash, M., & Bansal, P. (2022). Early Heart Attack Detection System. International Journal of Advances in Electronics and Computer Science(IJAECS), 9(12).

http://ijaecs.irai.in//paper_detail.php?paper_id=19338&nameEarly_Heart_Attack_Detection_System

SKILLS

Languages C, C++, Java, Python, JavaScript, HTML, CSS

Axios, Redux, Mongoose, Ky, Express, React, Node, Next, Discord.py, OpenCV, Pandas, Numpy, **Libraries & Frameworks**

TSFresh, Android, Streamlit

Databases MySQL, MongoDB, MariaDB, Redis, Firestore, PostgreSQL

EXTRA-CURRICULAR

• Google Developer Student Club: As a core team member, organized technical events and programming workshops attended by over 2,000 college students.

- Competitive Programming: Achieved a rating of 4 stars on CodeChef and solved over 700 problems on Leetcode. Voted as the Guardian Angel in the LeetCode study group for mentoring coders and sharing high-quality solutions.
- COVID-19 Volunteering: Supported the vaccination effort by participating in outreach programs of the local police department. Also volunteered at the vaccination center to aid citizens through the process.