Aditya Prakash

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EDUCATION

Emory University May 2025

Master of Science in Computer Science

Atlanta, GA

Cumulative GPA: 4.0/4.0

Relevant Coursework: Machine Learning, Algorithms, Cyber Security, Design Studio in Human Computer Interaction

Awards: Emory University Fall 2023 Scholarship

Devi Ahilya University

June 2023

Bachelor of Engineering in Computer Engineering

Indore, MP

Cumulative GPA: 8.68/10.0; Class Rank: 3/150; Graduated summa cum laude

Relevant Coursework: Data Structures and Algorithms, Operating Systems, Artificial Intelligence

TECHNICAL SKILLS

Programming Languages: C, C++, Java, Python, JavaScript, TypeScript, HTML, CSS

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

Libraries, Frameworks & Tools: Redux, Express.js, React.js, Node.js, Next.js, Tailwind CSS, Three.js, Vega, Git, Postman

Additional Skills: Kubernetes, Apache, AWS, GCP, D3.js, Charts.js, ZeroMQ, DevOps

WORK EXPERIENCE

Emory University Aug 2023 - Present

Graduate Teaching Assistant

Atlanta, GA

Mentored over 100 students for CS326: Analysis of Algorithm under Professor Michelangelo Grigni, fostering
understanding of complex algorithmic concepts through Python and Java, evidenced by a 22% increase in average
class grades.

Watto AI (YC S23) Jun 2023 - Aug 2023

Software Development Intern

Seattle, WA

- Led end-to-end development and design of the user interface. Developed 24 React.js and Next.js components and
 Figma designs. Prototyped the document hub, forms, outline editor and other core pages with JavaScript and
 TypeScript.
- Added the option of integrating Google Drive, Notion, and other platforms, enabling users to add 3rd party data sources as additional references, which contributed to a **39% increase in application usage**.
- Pioneered the implementation of a real-time outline feature, allowing users to receive instant drafts and provide feedback and customization, leading to a **58% decrease in document revisions**.

Rakuten Jan 2023 - May 2023

Software Development Intern

Indore, MP

- Spearheaded the development of the algorithmic backbone of the capacity manager. Wrote more than 50 Python and C++ algorithms for automation of network management, resulting in an 83% improvement in network reliability.
- Facilitated database connectivity with **Ubuntu** through **Docker**, automating code setup through shell scripts. Developed **Python** scripts for dummy input generation and database queries, resulting in a **30% reduction in execution time**.
- Successfully migrated from **OracleDB** to **MySQL**, which allowed for seamless integration with Rakuten's existing ecosystems. Additionally, switching to an open-source DB **saved over \$100,000** in **expenses**.

PROJECT EXPERIENCE

Concordance in Machine Learning and Deep Learning for Breast Cancer Screening

Aug 2023 - Dec 2023

- Fine-tuned ResNet50 and InceptionNetV2 models for tumor detection in mammograms, which are X-Ray scans of the breast. Achieved 77% accuracy and 91% AUC with best models.
- Created end-to-end pipelines for seamless integration of image data with clinical information, processing a dataset over **5TB** in size and comprising **73,000** individual patient diagnoses.
- Implemented Naïve Bayes, SVMs, kNNs, Decision Trees, Logistic Regression etc. to operate on clinical data. Assessed inter-observer variability using Cohen's Kappa, which achieved a score of 0.47858.