Aditya Prakash

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EDUCATION

Emory University   May 2025
Master of Science in Computer Science   *Atlanta, GA*
Cumulative GPA: 3.9/4
Relevant Coursework: Machine Learning, Algorithms, Cyber Security, Design Studio in Human Computer Interaction
Awards: Emory University Fall 2023-24 Scholarship
Offices: Emory International Student Council, Computer Science Program Ambassador

Devi Ahilya University   Jun 2023
Bachelor of Engineering in Computer Engineering   *Indore, MP*
Cumulative GPA: 8.68/10.0; **Class Rank:** 3/150; Graduated **summa cum laude**

TECHNICAL SKILLS

Programming Languages: **C, C++, Java, Python, JavaScript, TypeScript, R, Golang, Rust, HTML, CSS**
Databases: **SQL, MySQL, MongoDB, MariaDB, Redis, Firestore, PostgreSQL, Stata**
Libraries, Frameworks & Tools: **Redux, ExpressJS, ReactJS, NodeJS, NextJS, Tailwind, Angular, Spring, Django, Flask**
Additional Skills: **Kubernetes, Apache, AWS, GCP, ZeroMQ, Agile, DevOps, Git, CI/CD, Kafka**

WORK EXPERIENCE

Emory University   May 2024 - Present
Graduate Research Assistant   *Atlanta, GA*

- Wrote **R and Stata** packages to perform regression and meta-analysis, streamlining the process of combining and comparing results from multiple studies, which **reduced manual efforts by 80%**.
- Analyzed more than **200 field experiments** to create an inventory of treatment and baseline variables, leading to the **development of a comprehensive database** used for further econometric analysis and policy recommendations.
- Automated the sanity testing pipeline which **increased time efficiency by 22%** and reduced error rates in replication.

Watto AI (YC S23)   Jun 2023 - Aug 2023
Software Development Intern   *Seattle, WA*

- Led end-to-end development 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**.