

ALEKYA BAIRABOINA

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EDUCATION

San Francisco State University, San Francisco

Jan'23 – May'24

Master of Science, Computer Science: **CGPA: 4.0/4.0**

National Institute of Technology, Nagpur

Jul'15 – May'19

B.Tech, Computer Engineering

SKILLS

Programming: C, C++, Python, Java, JavaScript, TypeScript

Web Technologies: HTML, CSS, NodeJS, ReactJS, ExpressJS, Spring Boot, Hibernate, Django, Material-UI

Tools: Git, Bitbucket, Postman, Figma, Miro

Database: MySQL, SQLite, ProgressSQL, MongoDB

Data Science: NumPy, Pandas, TensorFlow, Keras, SkLearn, Matplotlib

PROFESSIONAL EXPERIENCE

San Francisco State University | Graduate Research Assistant | San Francisco

Jun'23 – Present

YouDescribe | [ReactJS | TypeScript | MongoDB] | Website: <https://youdescribe.org/>

- Developing and optimizing features for YouDescribe, an application providing audio descriptions for YouTube videos to enhance accessibility for visually impaired users worldwide.
- Resulted in a 20% increase in new users within 3 months, significantly improving user engagement.

Schrocken Inc, Senior Full Stack Developer [NodeJS | ReactJS | Express | JavaScript | MongoDB]

Jan'21 – Jan'23

- Improved application response time by 70% and user experience by optimizing performance of the Mosymphony application, a platform that enabled streamlined process flows across 10+ Pharma supply chains.
- Lowered data conversion time by 30% by designing and developing a complicated SFTP integration layer that included a separate SFTP server to parse .csv format files and convert data to JSON and vice versa.
- Reduced webpages reload processing time from 7 secs to 2 secs by improving the performance of pagination.

Schrocken Inc, Full Stack Developer [NodeJS | ReactJS | Express | JavaScript | MongoDB]

Jan'20 – Jan'21

- Reconciled 18 measurement units and 9800 material codes given as inputs to our application by different Pharma manufacturers, reducing user manual efforts by 10x and improving data accuracy by 30%.
- Compiled and analyzed code of 25+ end-to-end business process flows across user interface and data import/export to troubleshoot production issues and improved performance and robustness of the application.

NxtWave, Full Stack Development Trainee [JavaScript | NodeJS | ReactJS | SQLite | MongoDB]

Jul'19 – Dec'19

- Successfully designed, and built 15+ web applications, including HR Data management, App store and to-do application.
- Engineered applications across diverse domains, ensuring exceptional user experiences and addressing various challenges.

PROJECTS

Hotel Management System | [ReactJS | Spring Boot | MongoDB | AWS EC2] | [GitHub](#)

- Implemented a dynamic system for 1000+ hotel rooms that allows administrators to add, edit, and delete peak prices.
- Users can easily search for hotels by location, check room availability, select amenities, and manage bookings.

Picture Perfect for content creators | [ReactJS | Django | Jest | MySQL | AWS EC2 | Python | Javascript] | [GitHub](#)

- Implemented image editing features, search functionality, and photo organization in the "picture perfect" application to empower content creators to advertise and sell their content.

Antibiotic ResistX | [Python | Pandas | SkLearn | Xgboost | Matplotlib] | [GitHub](#)

- Built antibiotic resistance prediction model using Random Forest and Gradient Boosted Tree to optimize drug predictions.
- Evaluated the models on a dataset comprising 18k samples, achieving a significant accuracy rate of 75%.

Project Rebound for incarcerated students | [Figma | Miro | Heuristic evaluation | Usability testing] | [GitHub](#)

- Created a Figma prototype for 600 incarcerated students and incorporated personalized learning paths and language filters.
- Boosted user satisfaction by 20% through iterative development, heuristic evaluation, and usability testing.

ACHIEVEMENTS AND RESPONSIBILITIES

- Ranked in the top 0.8% among 1.5 million applicants in JEE MAINS 2015.
- Received Innovation Award for introducing Excel upload feature and automatic report functionalities at Schrocken Inc.