Akhil Manoj

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EDUCATION

New York University, Tandon School of Engineering — New York City, U.S.A
Master of Science, Computer Engineering — *Expected May 2026*
- GPA: N/A (First Semester)

Indian Institute of Technology, Dharwad — Karnataka, India
Bachelor of Technology, Mechanical Engineering — *Aug 2018 – May 2022*
- GPA: 8.9/10

EXPERIENCE

Software Development Engineer — June 2022 – June 2024
Gupshup — *Bengaluru, India*
- Led the development of the **Ad-creation feature** within the Gupshup platform, enabling the creation of multimedia Facebook ads directly from Gupshup.
- Designed and implemented a service to fetch **real-time ad insights**. Improved service efficiency by introducing batch requests, rate limiting, and notifications. This significantly improved the timeliness and accuracy of data for **25 business clients** managing over **2000 Facebook ads**.
- Cut deployment time by **55%** through custom Docker images, improving the application deployment process.

Full-Stack Web Developer Intern — June 2021 – August 2021
Axidio — *Bengaluru, India*
- Contributed to the **development of the partner portal**, enabling partners of the company to track their products, access materials, and communicate with stakeholders.
- Revamped the front-end screens with **efficient state management** improving the application's performance and maintainability.
- **Developed portal authentication** including both in-app and third-party login options.

RESEARCH

User generated 3D splines for AR applications — April 2021 – November 2021
Adviser: Prof. Samarth S. Raut, Indian Institute of Technology, Dharwad — *Dharwad, India*
- Conducted a literature review on **three-dimensional curves in computer graphics** and created a web application for creating and manipulating splines on a 3D canvas.
- Implemented a sketching tool for precise 3D hand gesture inputs, and optimized the application's performance by improving the frame rate by **25% through multithreaded I/O operations**.

PROJECTS

Web-based Chess Engine | *Javascript/JQuery, HTML/CSS, Heuristic Algorithms* — Jan 2022 – March 2022
- Built a Chess Engine to calculate the optimum next move using the **Minimax algorithm**, with heuristics based on board-position and piece-values.
- Enhanced search efficiency with **Move-Ordering and Alpha-Beta pruning**, enabling the engine to beat a 2000 ELO bot on Chess.com
- Developed a web-based front-end for real-time gameplay and project demonstrations directly from the browser

Campus-Recruitment Web Application | *ReactJS, Django* — Jan 2022 – March 2022
- **Led a team of 7** in the end-to-end development of a campus recruitment web application, ensuring alignment on project milestones and fostering a collaborative team environment. The application is now used by over **400 students**
- Implemented core features including student profiles, company job postings, and application tracking, ensuring an intuitive and efficient user experience
- Facilitated successful adoption by managing deployment and gathering user feedback.

TECHNICAL SKILLS

Programming Languages,: Java, C/C++, Javascript, Python
Tools and Frameworks: REST APIs, Git, Numpy, Matplotlib, Matlab, Springboot, SpringCloud, MySQL, Docker, Redis, RabbitMQ, React, Redux, TailwindCSS, AWS