Ajinkya Talekar

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Education

University at Buffalo, The State University of New York Aug. 2022 - Dec. 2025
Bachelor of Science in Computer Science, Minor in Mathematics *GPA: 3.9*

Technical Skills

Languages: Python, Java, C/C++, SQL (Postgres), JavaScript, TypeScript, Go, HTML/CSS
Frameworks: React, FastAPI, Django, Flask, Next.js
Developer Tools: Git, Docker, Traefik, Supabase, AWS, Linux, CI/CD, MongoDB, Github Actions

Experience

Software Engineer Intern Dec. 2024 – Mar. 2025
SteinnLabs *Remote*

- Designed **PostgreSQL** database schema and developed scalable RESTful API using **FastAPI** for appointment scheduling application, implementing authentication, role-based access control, and row-level security.
- Implemented secure storage and deployment pipelines using **AWS** services, leveraging S3 buckets for data storage, Amplify for scalable front-end hosting, and Route 53 for domain management.
- Engineered CI/CD workflows using **GitHub Actions** and AWS Amplify to automate deployments, reducing deployment time by 80%, ensuring seamless updates, and high availability in agile environment.
- Designed responsive and visually appealing appointment management dashboard with **React** and **TailwindCSS**.

Teaching Assistant Aug. 2023 – Present
School of Engineering and Applied Sciences, University at Buffalo *Buffalo, NY*

- Instructed 600+ students in Discrete Structures, reinforcing fundamental concepts for Data Structures & Algorithms.
- Led weekly recitations for 40+ students, covering logic, proofs, combinatorics, and graph theory with real-world CS applications. Provided 2+ weekly office hours for programming support and clarifying theoretical concepts.
- Collaborated with faculty, evaluated assignments and delivered feedback to enhance student understanding.

Projects

craft4free.online | *Python, Docker, FastAPI, React, AWS, Oracle Cloud, PostgreSQL* Jan. 2025 – Present

- Developed cloud-based platform for quick on-demand deployment and management of Minecraft game servers on the cloud, reducing setup time taking hours manually to under 2 minutes.
- Set up automated server deployment system using **Docker** containers, orchestrating seamless provisioning on **Oracle Cloud** and **AWS EC2** instances.
- Built FastAPI-powered RESTful backend to automate server lifecycle management (initialization, monitoring, updates, and termination) while ensuring seamless API-driven control. Integrated reverse port forwarding with **Traefik** to maintain static URLs for game servers despite dynamic IP changes.
- Designed fast and responsive frontend with React, TailwindCSS, and ShadCN UI, enhancing the user experience with intuitive dashboard for managing game servers with real-time server status updates with websockets.
- Conducted extensive scalability and stress testing, optimizing resource allocation to handle 50+ servers simultaneously on single cloud instance without performance degradation.

Autovid | *Python, Django, CI/CD* Oct. 2024 - Nov. 2024

- Programmed **Python** automation library (500+ downloads) leveraging gTTS, PRAW, and MoviePy to reduce video creation time from 60+ minutes to under 5 minutes.
- Produced **Django** web interface with responsive design, enabling non-technical users to generate content without Python knowledge.
- Implemented robust **CI/CD pipeline** with GitHub Actions, maintaining 95%+ test coverage through pytest.

SwiftGesture | *TensorFlow, OpenCV* Jul. 2024 - Aug. 2024

- Engineered real-time hand gesture recognition system using **TensorFlow and MediaPipe** that achieved 95%+ accuracy for American Sign Language detection.
- Built efficient machine learning pipeline that trains models on only 5 input images per gesture, reducing data collection requirements by 75% compared to standard approaches.
- Deployed **Streamlit** application enabling users to train custom gesture models in under 5 minutes.