Saksham Yadav

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EDUCATION

Santa Clara University, Santa Clara, CA **June 2026**
Master of Science, Computer Science|

Savitribai Phule Pune University, Pune, India **May 2022**
Bachelor of Engineering, Information Technology | GPA: 9.22/10

SKILLS

Languages & Paradigms: Python · C++ · Go · JavaScript · TypeScript · SQL
Machine Learning & Data Science: PyTorch · torchvision · TensorBoard · scikit-learn · NumPy · matplotlib · Pillow
Web & Backend: Flask · Node.js · Express · React · Redux · Next.js
Databases & Big-Data: PostgreSQL · MongoDB · MySQL · Hadoop · MapReduce
Cloud & DevOps: AWS (EC2, S3, Lambda) · GCP · Docker · Apache Airflow · Microservices
Engineering Practices & Tools: Git · Postman · OOP & Design Patterns · Data Structures & Algorithms · REST APIs

WORK EXPERIENCE

Software Engineer, Accenture **August 2024**
- Coordinated across 3 cross-functional engineering teams to integrate domain-specific logic into data workflows, increasing stakeholder-relevant insights by **30%**.
- Led optimization of DAG runtimes in Apache Airflow, reducing average execution time by **40%** through advanced SQL refactoring and task dependency tuning.
- Streamlined BigQuery-based monitoring pipelines on GCP, implementing automated data validation scripts that cut manual QA overhead and reduced data errors by **25%**.

Flutter Developer Intern, Risva Rachna **April 2021**
- Built and deployed **CityGuide**, a Flutter-based travel app with map integration and offline access to critical helpline info, improving tourist usability.
- Enhanced user interface of AnyLopez App, used daily by **over 100 users**, resulting in a decrease in user-reported navigation issues and improved responsiveness across all iOS and Android devices.

PROJECTS

[GAN-based Emoji Generator](#) (Python, PyTorch, torchvision, NumPy, Pillow, matplotlib, DCGAN) **July 2025**
- Built a Deep Convolutional GAN (5-layer ConvTranspose2d generator & 5-layer Conv2d discriminator) in PyTorch, training on a custom dataset of ~8 000 64×64 emoji-style face images with on-the-fly resizing and normalization.
- Leveraged **torchvision** for dataset handling & data augmentation (resize, normalize, random flips), **Pillow (PIL)** for image I/O, and **NumPy** for tensor-level preprocessing and metric computations.

[PixlDB](#) (Go, Mutex,Threads,Concurrency) **June 2025**
- Architected a buffered **Write-Ahead Log** with mutex-based synchronization and periodic flushes, sustaining over **129K ops/sec in balanced benchmarks (77K writes/sec, 52K reads/sec) with sub-millisecond average latency.**
- Implemented a modular **B+ Tree storage engine** with range queries, node splitting/merging, and a pluggable JSON-based persistence layer, enabling durable key-value storage across sessions.

[Draw.io](#) (JS, React, Redux, Tailwind, Shadcn, Express, Nodejs) **April 2024**
- Designed a real-time Pictionary game powered by Socket.io, enhancing user interaction and boosting player retention by **35%**, while demonstrating exceptional technical and creative skills.
- Developer persistent scoring and customizable leaderboards into the pictionary game, improving user engagement and doubling the average session length.
- Integrated **Tailwind CSS and ShadCN UI** library to develop **15+ custom UI components** with smooth transitions and intuitive drawing functionalities, receiving positive feedback from beta testers.

ACHIEVEMENTS

Won the Best Graduate Hack Award at Hack for Humanity.
Global rank 606 in CodeChef February Lunchtime div3 out of 5k+ candidates.
Global rank 3706 in div2 Codeforces Round 695 out of 20k+ candidates.