Lajat Manekar

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Experience

- **Human Resocia** — Tokyo, Japan
  Backend Engineer — *Feb 2024 – Present*
  - **Tech Stack** C++, Python, Perl, Shell, Ansible, AWS, Jenkins
  - Delivered advanced, scalable backend modules improving system functionality by 18%, enhancing core features and user satisfaction.
  - Collaborated closely with support and engineering teams to reduce incident response times by 30%, drastically boosting uptime to 99.9%.
  - Built a robust automated testing pipeline with 90% coverage, cutting manual tests by 40% and dramatically speeding deployments by 20%.
  - Refactored 5,000+ lines of legacy code to improve maintainability and scalability; led 20+ comprehensive knowledge-transfer sessions.
  - Optimized overall system performance by 20% via modern libraries, improved algorithms, and innovative new high-performance modules.
- **ElasticRun** — Pune, India
  Associate Software Engineer — *Jan 2022 – Jan 2023*
  - **Tech Stack** Python, JavaScript, TypeScript, Dart, Flutter, Angular, AWS, MongoDB, Docker, Jenkins
  - Expertly engineered 20+ custom algorithms aligned with key stakeholder goals, improving project accuracy and operational efficiency.
  - Successfully led migration of 20,000+ lines from Angular to Flutter, significantly enhancing app performance and reducing critical defects.
  - Proactively mentored interns across 10+ complex legacy projects, accelerating onboarding and improving overall code quality.
  - Delivered targeted optimizations increasing module throughput by 12%, substantially enhancing overall user experience.
  - Strategically drove multiple in-house projects achieving 15-20% efficiency gains and significantly boosting user satisfaction by 15%.
  - Designed scalable cloud container environment, dramatically increasing team productivity and deployment speed by 20%.

Projects

- **Comprehensive Augmented Reality (AR) Dictionary** — Source Code
  - **Tech Stack**: C#, Unity, ARCore, Google Custom Search API, Tesseract, OpenCV, NLTK
  - Engineered an AR dictionary app leveraging OCR and NLP to analyze 500+ words/session with 92% accuracy, delivering contextual definitions instantly.
  - Optimized ARCore pipelines, cutting overlay latency by 35% and accelerating user query response from 12s to 7.8s.
- **ETL-Batch-Processing** — Source Code
  - **Tech Stack**: Apache Hadoop, Spark, Sqoop, Kafka, Flink, Tableau, Python, AWS EMR
  - Designed and deployed a distributed ETL pipeline processing 20M+ records daily, slashing query times by 60%.
  - Automated real-time data ingestion using Kafka and Spark on EMR; enabled live Tableau dashboards, reducing reporting latency from hours to minutes.
- **Realtime Collaborative IDE (ideinnit)** — Website
  - **Tech Stack**: YJS, Monaco (desktop), Codemirror 6 (mobile), LSP via Modal, Svelte 5/Kit, Tailwind CSS 4, Firebase Realtime DB, Playwright
  - Developed a real-time collaborative IDE delivering 99.8% state consistency and <500ms latency, supporting 2,000+ monthly code submissions.
  - Integrated mobile and desktop editors with robust LSP-based IntelliSense and 95% Playwright test coverage, ensuring high reliability.

Education

- **Georgia Institute of Technology** — Georgia, United States of America
  Masters in Computer Science (Specialization in AI); - — *Jan, 2026 - Present*
  Courses: Knowledge Based AI, High Performance Computing
- **Vishwakarma Institute of Technology** — Pune, India
  Bachelors in Technology; CGPA: 7.98 — *Aug, 2018 - July, 2022*
  Courses: Object Oriented Programming, Operating Systems, Analysis Of Algorithms, Artificial Intelligence, Machine Learning, Network Security.

Skills

- **Languages** C, C++, Dart, JavaScript, Perl, Python, Shell scripting, SQL, Typescript
- **Frameworks** Angular, Django, Flask, Flutter, Frappe, React
- **DevOps & tools** AWS, Azure, Clang, Cobertura, Docker, Firebase, Jenkins, GCP, GIT, JIRA, Kubernetes, LLVM, Postgres
- **Coding Profiles** Codechef, Codeforces, Github, Leetcode

Certifications and Achievements

- Selected as a MariaDB Contributor in GSoC 2023 to lead six-month integration of the Fuzzing Pipeline into ColumnStore Engine.
- Joined The-Algorithms Initiative in July 2021, took the responsibility of maintaining the website repository and the C++ codebase.
- Passed N3 Level of NAT Test, demonstrating proficiency in Japanese, including reading, writing, and conversational skills.
- Certificates across diverse disciplines, including cloud computing, machine learning, DevOps, and software development.