NIKHIL LONDHE

nlondhe@andrew.cmu.edu | +1-412-918-6248 | linkedin.com/in/nikhil-londhe | nikhill.cc

EDUCATION

Carnegie Mellon University (CMU) - School of Computer Science   Pittsburgh, PA
Master of Software Engineering   Dec 2025
Courses: Database Systems, Search Engines, Software Architecture, Software Project Management, Quality Assurance

University of Mumbai (MU) - Fr. Conceicao Rodrigues Institute of Technology   Mumbai, IN
Bachelor of Engineering in Computer Engineering   May 2019

EXPERIENCE

Surefront — Audit Logging & Process Analytics Platform | Team Lead   Jan 2025 - Present
- Designed and shipped a cloud-native process-analytics system for Surefront's PLM web app **(Django, Python)**, scaling to **60M+** daily events through a replicated logging and analytics pipeline **(AWS DMS, Glue, S3, Athena, CloudWatch)**, by leading a **6-person team** on architecture, latency-overhead SLOs validated with multithreaded load testing, capacity planning, a custom user-context capture library, and a fault-isolated redundant system **(Redis & Celery Beat)**.
- Cut root-cause analysis time for B2B e-commerce workflows by over **99%** (from days to minutes) during beta rollout, by leading architecture reviews, co-owning a quality plan with **95%+** test coverage, and optimizing analytics data capture and query paths to keep per-event latency overhead **sub-10 ms.**

Orah — Core Product Backend | Software Development Engineer 2   Apr 2022 - May 2024
- Reduced manual scheduling overhead for K-12 school attendance, automating **12K+** recurring schedules across **350+** schools, by designing the recurring events engine **(TypeScript, Node.js)** to support flexible repeat rules (like every weekday or Mon-Wed-Fri) while allowing one-off changes to individual days.
- Led a cross-team effort to design and ship SIS (Blackbaud) sync APIs, processing **22K+** events per day by offloading updates to background workers and keeping integration logic isolated from the core Events request path.
- Launched self-serve trials for new schools, cutting routine engineering work for trial setup by **100%**, by seeding demo data, limiting features for trial accounts, and building automatic trial expiry and upgrade flows **(React)**.
- Increased delivery speed by **250%** on core Events and attendance features by leading a **4-engineer team** and removing bottlenecks in code review, sprint ceremonies, and cross-team dependencies.

LTIMindtree — Engineering Productivity & Infrastructure | Software Engineer   Jun 2019 - Apr 2022
- Implemented automated regression testing in an internal testing platform **(Java)**, adding built-in coverage analysis, speeding up release cycles by **16%** for **10+** enterprise engineering teams.
- Improved test quality and adoption of the internal testing platform, raising test coverage from **20% to 97%** and reducing post-release bugs by **60%** by enforcing coverage standards and streamlining testing workflows.

PROJECTS

Database Internals (C++) | Bustub – Database Systems | CMU   Jan 2025 - Apr 2025
- Implemented core DBMS internals, including a thread-safe buffer pool (**8-thread contention-tested, 100K+ ops/thread**), a concurrent B+ Tree index (**10-thread insert/delete, 5K+ keys**), and a full query engine with joins, sorting, and aggregation.
- Constructed MVCC concurrency control ensuring ACID compliance and high-throughput transaction processing under contention, validated on **1M+** row datasets and randomized workloads.

Search Ranking & Retrieval Engine (Python) | Search Engine | CMU   Aug 2024 - Dec 2024
- Developed a search engine from scratch with BM25, Boolean, fielded, and learning-to-rank pipelines; evaluated across **4** TREC-style datasets with **10K+** queries and **40+** ranked lists, with performance measured via MAP and α-NDCG.
- Engineered multistage re-rankers with BERT and Coordinate Ascent, **doubling** MAP, α-NDCG, and multi-intent precision by up to **120%** across diverse retrieval tasks, documented in a detailed evaluation report.

SKILLS

Programming Languages: C++, Java, Go, Rust, Python, TypeScript, JavaScript, SQL, C, HTML/CSS.
Frameworks & Libraries: Node.js, Express, React, Next.js, Angular, Django, Spring Boot, LangChain, Jest.
Databases: PostgreSQL, MySQL, DynamoDB, MongoDB, Redis, Elasticsearch.
Cloud & Infrastructure: AWS, GCP, Docker, Kubernetes, Terraform, Kafka, Spark, Airflow, Unix/Linux.
DevOps: Git, GitHub Actions, Jenkins, CircleCI, CI/CD, Datadog, SonarQube, Bash scripting.
Practices & Engineering: System Design, API Design, Data Structures & Algorithms, Design Patterns, Agile, UX Design.
Certifications: Certified ScrumMaster® (CSM).

AWARDS & ACCOMPLISHMENTS

- LeetCode 1900+ rated | Top 5% | 1100+ problems solved.   Dec 2025
- 3rd Place Winner - CITAP SITAC (National Software Architecture Competition).   May 2025
- South Asia Regional Finalist, TopCoder Open Algorithm Competition.   Apr 2021