

NIKHIL LONDHE

nlondhe@andrew.cmu.edu | +1-412-918-6248 | [linkedin.com/in/nikhil-londhe](https://www.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

SKILLS

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

EXPERIENCE

Surefront - CMU Capstone Project Team Lead	Jan 2025 - Present
- Led a 6-person team to plan, design, present, and deliver a Process Analytics feature by building an end-to-end event logging and process mining pipeline, converting over 60 million daily events into dynamic visualizations for business stakeholders. - Reduced root-cause analysis time of B2B e-commerce workflows and operational processes from several days to minutes, resulting in a 25% drop in missed product deadlines during beta rollout.	
Orah Software Development Engineer 2	Apr 2022 - May 2024
- Managed a 4-person team as Scrum Master, removing delivery bottlenecks and boosting sprint throughput by 250% via workflow optimization, code review, and collaboration with Monday Dev and GitHub. - Engineered the Events system (80% adoption), delivering complex scheduling, granular permissions, and compliance features with Node.js and React, in collaboration with top-tier clients. - Ensured platform reliability and uptime for 250K users and 30K concurrent sessions by implementing monitoring, alerting, load testing, stress testing with AWS and Datadog - achieving 100% uptime under peak load. - Improved API response times 5x through MySQL query profiling, index tuning, and N+1 elimination - lowering latency and backend load across core user flows.	
LTIMindtree Software Engineer	Jun 2019 - Apr 2022
- Proposed and developed automated regression test integration as a foundational feature of an internal delivery platform, automating test coverage analysis and accelerating release cycles across 10+ enterprise engineering teams. - Spearheaded structured quality planning to raise test coverage from 20% to over 97%, driving team-wide adoption of coverage standards, enhancing system reliability, and reducing post-release bugs by 60%. - Revamped legacy UX workflows, increasing adoption by 60% and expanding usage to 10+ internal teams.	

PROJECTS

Bustub - Database Systems Carnegie Mellon University	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 Engine Carnegie Mellon University	Aug 2024 - Dec 2024
- Built a full-stack 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.	
Deep Learning IoT Device University of Mumbai	Aug 2018 - June 2019
- Prototyped a machine learning-powered IoT device using Raspberry Pi and TensorFlow Lite, applying deep learning (transfer learning) for on-device defect detection in constrained environments (1 GB RAM, 5V); published in Springer ICIoTCT. - Delivered an end-to-end runtime pipeline for image capture, inference, and alerting, reducing latency from 5s to sub-1s to enable real-time defect detection at the edge.	

AWARDS & ACCOMPLISHMENTS

3rd Place Winner - CITAP SITAC (National Software Architecture Competition).	May 2025
South Asia Regional Finalist, TopCoder Open Algorithm Competition.	Apr 2021
Top 5% - Halite III by Two Sigma; designed real-time AI agents for strategic resource control.	Jan 2019