

Eungchan Kang

Software Engineer

Experienced across the full system lifecycle - from architectural design to production deployment - with strong expertise in:

- Multi-tenant architecture
- OLTP vs Analytics workload separation
- AWS-based cloud systems
- RDBMS internals and execution plan optimization
- High-performance query tuning and statistics engineering

Designed production-scale systems supporting thousands of organizations and large transactional workloads, with measurable performance improvements

Contact

Address

Seoul, Korea, Republic of 08735

Phone

821028045097

E-mail

yeschan119@gmail.com

Portfolio

yeschan119.com

Skills

Language : C, C++, C#, Python, Typescript, SQL, PL/SQL

Database : Oracle, MySQL, MsSQL, Tibero

Cloud | Infrastructure : AWS, Azure, Git, Docker

Framework | Platform : Angular, ASP.Net Core, Flutter

Professional Experience

2026.05 - Current

Full Stack Software Engineer

Ko&Clo, Inc, Seoul South Korea

Key Responsibilities

- Designed and developed a unified apparel distribution management system covering sales, inventory, ordering, settlements, and store operations.
- Architected the system using layered software architecture, separating domain, API, data, and deployment concerns.
- Built an AI agent framework enabling natural language queries, system control, and workflow automation.

2024.02 – 2026.04

Full Stack Software Engineer

Kokomo Solutions, Inc, Chicago IL United States

Key Responsibilities

- Designed and implemented scalable backend systems using ASP.NET Core MVC
- Developed Angular-based front-end features including kiosks, chat services, and analytics dashboards
- Built REST APIs supporting real-time incident reporting and classification
- Collaborated with cross-functional teams to deliver production-ready features

Data Platform & Analytics Ownership

- Designed and implemented end-to-end analytics dashboard
- Create/Update/Tune Views/Indexes for high-frequency queries.
- Applied composite indexes across frequently filtered columns
- Applied various partitioning strategies by table workload type
- Reduced dashboard latency by 30%
- Improved query performance by 40%

Performance & Database Engineering

- Optimized MySQL and MSSQL queries under production load
- Improved overall application performance by 30%.
- Implemented database monitoring features for performance management.
- Introduced data isolation techniques to enhance multi-tenant security
- Used various skills(parallel api calls, async)to reduce client-side latency.

2022-01 - 2024-02

Database Engineer (RDBMS Engine Development)

Tmaxgroup, Seongnam South Korea

Core member of RDBMS engine team focusing on Optimizer and Statistics modules.

Engine Development

- Designed and implemented statistics collection modules for database indexes
- Identified clustering factor inaccuracies causing performance degradation
- Developed dedicated index statistics collection node
- Achieved 90%+ statistics accuracy improvement
- Improved index scan performance stability

Query Optimization & Plan Management

- Implemented SQL Tuning Advisor features
- Implemented SQL Plan Management (SPM)
- Developed optimizer logic in C++
- Enhanced Join selectivity calculation (5s → 1s improvement)
- Optimized OR-condition handling (3s → 0.8s improvement)
- Reduced targeted feature execution time (827ms → 27ms)

Client Support & Performance Tuning

- Provided SQL tuning support to enterprise clients including banks
- Analyzed execution plans and resolved performance bottlenecks
- Optimized stored procedures and indexing strategies

Legacy Code Modernization

- Migrated C-based legacy components to C++
- Refactored optimizer modules for maintainability and extensibility

2021-09 - 2021-12

Artificial Intelligence Engineer

AIWorkx, Seoul South Korea

Developed AI vision software

- Implemented AI vision solutions using image segmentation and annotation algorithms.
- Developed edge device AI software leveraging object detection algorithms, such as YOLO.

Conducted research and presented findings on AI vision

- Regularly studied and presented research papers on AI vision to identify optimized algorithms and improve implementation strategies.



Education

Bachelor of Science: **Information System**

Hanyang University - Seoul South Korea

minor : **Computer Science**

- Total GPA : 4.18 / 4.5
- Major GPA : 4.32 / 4.5