Rana Ray

Kendall Park, New Jersey | askrana@gmail.com | 732-718-4360 | linkedin.com/in/rana-ray-20b3922

SUMMARY

Database and platform engineer with 25+ years at Bloomberg — hands-on throughout: I design the architecture and I build the tooling. I am a leading member of the team responsible for one of the largest database estates in financial services — 300 servers and 800 Oracle and PostgreSQL instances totaling close to 1 petabyte (largest single OLTP instance 33TB). My expertise covers complete database management — architecture, design, administration, automation, zero-downtime migration at scale — with fluent Python: I personally rewrote migration loaders, built license-detection tooling, and wrote the team's runbooks. In the past year I helped lead my team's shift to AI-first engineering: I authored Claude-based AI skills adopted by my entire team and built an end-to-end AI-assisted delivery pipeline. I am looking for a senior engineering leadership role (NY / NJ / remote) valuing database depth, automation, and applied AI.

LEADERSHIP & CORE COMPETENCIES

- Database leadership — Oracle & PostgreSQL estates: architecture, standards, performance, security, HA/DR
- Zero-downtime migration & modernization — major-version upgrades, cross-platform migration, Oracle-to-PostgreSQL
- Automation architecture — builds, change, backup/restore, migrations/upgrades, monitoring integration; fluent Python
- AI-assisted engineering — Claude-based AI skills and agents, AI-first team transformation
- Team leadership — technical lead of a 20-person Oracle and PostgreSQL team; senior member of a 7-person disaster resilience team

EXPERIENCE

Senior Software Engineer — Application Team, Disaster Resilience — Bloomberg LP, New Jersey
2025 – Present

- Member of the 7-person Disaster Resilience as a Service application team, building resilience and recovery services for critical platforms.
- Lead engineer for AI adoption: authored reusable Claude-based AI skills (automated code review, test-case generation, flow-diagram creation) adopted by every member of the team; manages the group's Claude.md; guided the team to do most of its development work in Claude Cowork; built an end-to-end AI-assisted delivery pipeline — meeting notes feed Claude, which produces the design, Jira tickets, code, code review, monitoring rules (GUTS), and the implementation plan.
- Re-engineered the disaster-recovery data loader from ~2.5 hours to under 4 minutes (hourly recovery cadence).

Database Engineering Team (DBA Group) — Bloomberg LP, New Jersey
2001 – 2025

- Leading member of the team responsible for the design, architecture, and operation of Bloomberg's Oracle and PostgreSQL estate — 300 servers, 800 instances, close to 1 petabyte in total, largest single OLTP instance 33TB — supporting mission-critical financial applications; technical lead of the ~20-person Oracle and PostgreSQL DBA team for five years.
- Principal architect and planner for a major-version Oracle migration spanning 200+ servers (9→10, 10→11, and the major enterprise migration to 19c); led the migration team and coordinated overseas contractors — completed with zero database outages.
- Chief architect of automation across the database lifecycle — builds under multiple deployment models, change management, backup and restore, and migration/upgrade automation with pre-checks, validation, and rollback — integrated with monitoring and alerting (GUTS and other systems) — all engineered for zero downtime. My operating pattern: run a process manually two or three times, then automate it end-to-end.
- License and estate stewardship: in 2014, after auditing every prod/dev Oracle database for default-enabled licensed features, I built a paid-feature detection capability still in use today; led consolidation (four trading databases merged into one, server pairs retired) and a 2019–25 deprecation drive (20+ databases, ~15 decommissions).
- Performance and platform health: rolling upgrade of ~40 production databases cut downtime from 60–75 minutes to under 5 minutes per database; root-caused a 20x load regression to a vendor bug and secured the vendor's patch (6.5 hours to 22 minutes); ran an automated PostgreSQL bloat/fleet-health program — alerts on dead-tuple/disk growth and autovacuum freshness, freeze-age (XID) monitoring, per-table autovacuum tuning, alert queue/runbooks — reclaimed ~1 TB on a single estate, eliminated connection-pool exhaustion on 55 of 88 audited instances.
- Earlier flagship: led the Informix-to-Oracle migration program (2008–10) — rewrote the loader for parallel load, cutting load time from 4.5 hours to under 1 hour, zero downtime.

Team Leader — UBS 1998 – 2001

- Led a team delivering financial-services technology projects.

Earlier career — Senior Consultant, Paragon · Senior Executive, DHL · Consultant, CMC (Ordnance Factory, India) · Programmer, Minisoft Pvt Ltd

TECHNICAL SKILLS

Databases: Oracle, PostgreSQL, IBM DB2 UDB (administration, architecture, performance, HA/DR) | Languages: Python (fluent), SQL, PL/SQL | AI: Claude / LLM applications, AI agents, AI-assisted development workflows | Practices: database automation, data modeling, migration, ETL, CI/CD

EDUCATION

MBA — University of Phoenix
Post Graduate Diploma in Systems Management — NIIT, India
B.S. with Honors — University of Calcutta, India