
BHUPINDER SINGH

PROFILE

I am a diligent, dependable, and solutions-oriented data professional with experience in data architecture, database administration, BI, machine learning, and big data. I specialize in implementing corporate-wide data solutions and leading high-performing teams, and I am eager to take on new challenges in the field of data science or data architecture.

SKILLS

DATA ARCHITECTURE:

- Development, implementation, & enforcement of organizational data strategy, data governance practices
- Conceptual, logical, and physical data design (OLAP and OLTP)
- Data profiling, data semantics, data lineage, and data storage architecture
- Data integration, data migration, data cleanups, and ETL/ELT
- BI design/development, data lakes, data warehousing, and data mining

MACHINE LEARNING AND STATISTICAL MODELING:

- Supervised, unsupervised, & reinforcement learning algorithms, text and sentiment analysis

BIG DATA AND NOSQL:

- Hadoop ecosystem setup, monitoring, & maintenance, data acquisition, data wrangling, document & graph data modelin

DATABASE ADMINISTRATION:

- RDBMS installation, configuration, testing, monitoring, maintenance, upgrades, backups, and recovery
- Database migrations between homogeneous and heterogeneous databases
- Database replication, mirroring, and log shipping
- Security and access control, performance tuning, query optimization, troubleshooting of database issues
- Automation of alerts, warnings, and scheduled tasks
- Database storage, disaster recovery and resource planning

TOOLS

Python and major libraries for machine learning and data pipelines, T/PL-SQL, R, C#, C/C++, VB.Net, shell script, powershell script. HDFS, Cloudera, SQL Server 2008-19 (Azure, AWS), SSAS, SSIS, Oracle 8i/10g, MySQL, MongoDB, Couchbase, HBase, Neo4j, Progress10. IDEs: Anaconda, Jupyter Notebooks, PyCharm, RStudio, Visual Studio, RapidMiner, open3D. Tableau, PowerBI, SSRS, Logi Analytics.

EDUCATION

MASTER OF SCIENCE IN DATA SCIENCE, REGIS UNIVERSITY

- Capstone: Capture and save PyTorch model, data and model parameters in MongoDB using Python. Automate model creation and training for 3D point cloud scans data using Prefect.

BACHELOR OF COMPUTER SCIENCE AND ENGINEERING, GULBARGA UNIVERSITY

BACHELOR OF SCIENCE, PUNJABI UNIVERSITY

EXPERIENCE

DATA ARCHITECT, DEPARTMENT OF MANAGED HEALTH CARE, CALIFORNIA – SEP 2020-PRESENT

- Defined and implemented data governance strategies for health care data.
- Designed and implemented BI solution to provide 360 view of provider complaints and performance KPIs.
- Completed setup and architecture of data warehouse within first 3 months.
- Working on full-cycle data management system and ArcGIS solution for network adequacy reporting.
- Design and development of ELT/ETL, integration between on-premises and cloud systems.

DATA ARCHITECT, ANRITSU COMPANY; CALIFORNIA – MAY 2009-SEP 2020

- Provided business users with low-cost, secure, and timely access to data by creating 300+ logical and physical data models combining data from ERP, CRM, Finance Excel files, and departmental databases.
- Designed and implemented company-wide data infrastructure, including installations, resource planning, data governance, and disaster recovery planning.
- Led data migration, integration, and analytics tracks in SAP S4 implementation project.
- Led analytics, BI, and KPI solution design and development for 10 functional areas. Created ETL to gather, clean and combine data from multiple sources (CRM, ERP, etc.) . Converted data to snowflake/dimensional models. Reduced surplus inventory and cost by \$1M+, saved Ops department 100+ hrs/week by eliminating manual data collection, report generation, and KPI tracking.
- Advised management and IT for database, ETL, application, infrastructure, and SDLC process decisions.
- Reduced licensing costs, improved system performance and historical data preservation by creating and maintaining a data repository for ERP data.
- Designed and integrated CRM, ERP, public website, and various in-house business applications for 6 departments, improving task automation, customer order self-service, and data synchronization.
- Awarded for teamwork on 10+ projects, 2x for completing tasks below budget and 3x for early completion.

DEVELOPMENT MANAGER, ANRITSU COMPANY; CALIFORNIA – APR 2006-APR 2009

- Transitioned Dev team from waterfall to agile, accelerating feature release & reducing DevOps complexity.
- Enhanced software testing, improved code quality, and reduced post go-live issues by 80% by implementing issue management system.
- Led team of developers and testers to implement new CRM & migrate website from classic ASP to .Net 3.5.

SR. DATABASE ADMINISTRATOR, ANRITSU COMPANY; CALIFORNIA – DEC 2000-APR 2006

- Administered 350+ Oracle, SQL Server, and Progress databases. Tasks included OS tuning, data storage design and management, database creation and upgrades, security setup, schema design, data replication, resource planning and tuning, development instance refreshes, and data masking.
- Migrated Oracle databases to SQL Server, saving about \$500k/year on licensing costs.
- Setup and managed alerts and automation of corrective actions, preventing downtime and reducing cost.
- Removed reporting load from CRM and ERP systems and reduced licensing cost by 40% by setting up and moving reporting to replicated databases.

DATABASE ADMINISTRATOR, MEGASOFT CONSULTANTS INC.; VIRGINIA – APR 1999-DEC 2000

- Worked with a team of 45 professionals to convert databases and document translation application from client-server architecture to centralized web-based freelance platform.
- Resolved database record locking and performance issues, doubling application speed and reducing application and database issues by 25%.