# PROFESSIONAL SUMMARY

* 3+ years of experience in the insurance and healthcare domain, specializing in Neo4j graph databases, data engineering, and data integration.
* Expertise in Cypher query optimization and graph data modeling, ensuring efficient data retrieval and real-time insights.
* Proficient in PySpark, Databricks, and Redwood, building large-scale ETL pipelines for batch and streaming data processing.
* Hands-on experience with MySQL and NoSQL databases, optimizing performance and ensuring data consistency.
* Strong knowledge of cloud-based Neo4j environments and integrating data solutions with Azure.
* Developed Python-based automation scripts for data processing, validation, and reporting.
* Designed and implemented scalable data warehouses and data lakes to enhance analytics and business intelligence.
* Worked closely with cross-functional teams, including data scientists and analysts, to deliver end-to-end data solutions.
* Experienced in Agile methodologies, contributing to sprint planning, backlog refinement, and data-driven decision-making.

***WORK HISTORY***

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| **Client** | **Duration** |
| AMAT | Dec 2024 - Jan 2025 |
| The Home Depot, CVS | Jan 2023 – Aug 2024 |
| Qualcomm | Jan 2022 - Dec 2022 |
| Cheese Cake Factory | July 2021 - Dec 2021 |

# PROFESSIONAL EXPERIENCE

**Client: AMAT Dec 2024 – Jan 25**

**Role:DB Analyst**

# Responsibilities:

* Executed a **data migration project**, building scalable ETL pipelines using **Hadoop**, **Databricks**, **PySpark**, **MySQL**, and **Python** to process and transform large datasets.
* Designed and optimized database schemas in **MySQL** to ensure efficient data storage and retrieval during migration.
* Developed and automated scripts in **Python** to streamline data extraction, transformation, and loading (ETL) processes, enhancing overall efficiency.
* Utilized **Redwood tool** for real-time monitoring and scheduling of workflows, ensuring seamless pipeline execution and issue resolution.
* Processed and migrated structured and unstructured data across distributed systems while maintaining high data integrity and accuracy.

**Client: Bswift- CVS,THD Jan 2023 – Aug 24**

**Role:Neo4j Analyst**

**About Client:**

Bswift, a healthcare benefits administration platform, offers comprehensive solutions to streamline enrollment and management. It empowers organizations with tools for employee benefits selection, health coverage options, and wellness programs, enhancing user experiences while ensuring compliance and reducing administrative challenges.

**Responsibilities:**

* Integrated Neo4j data with BI tools , enabling interactive and real-time dashboards for business insights and decision-making.
* Designed and managed complex Neo4j graph models tailored to analytic requirements, ensuring flexible structures that support future data expansion
* Wrote and fine-tuned Cypher queries for efficient data manipulation and retrieval, using indexing ,query profiling and ontology development.
* Developed advanced queries for tasks like pattern matching and recursive retrieval, enhancing data analysis capabilities.
* Developed ETL work flows to support cloud-based data ingestion, maintaining data consistency across Neo4j and additional databases
* Worked closely with data scientists, analysts, and back-end developers to ensure seamless integration between Neo4j and other data systems.

**Functional & Configuration Skills:**

* **Workflow Analysis and Dependency Mapping:** Modeled claims processes as a graph

where nodes represent claims, adjusters, customers, and associated documentation.

* **Dependency Resolution and Bottleneck Identification:** Used graph algorithms like shortest

path or community detection to identify process dependencies, repetitive tasks, and potential delays in claims networks.

* **Optimized Processing:** Automated task assignment to adjusters based on the shortest resolution
* path, and used graph traversals to quickly link unresolved claims to critical resources or related cases, reducing overall processing time.

**Client: Bswift-Qualcomm Jan 2022 – Dec 2022**

**Role: NEO4J DEVELOPER**

**About Client:**

Qualcomm partners with bswift to provide cloud-based benefits administration solutions, streamlining employee benefits management. bswift's platform offers customized health and welfare benefits for Qualcomm’s workforce, enhancing engagement and efficiency.

**Responsibilities:**

* Working on graph databases, Utilized APOC procedures and custom scripts for efficient data loading and transformation.
* Familiarity with Agile methodologies, specifically Agile Scrum, and project management tools such as Azure Devops.
* Experience in translating business requirements into functional specifications in collaboration with cross-functional teams.
* Translated business requirements into clear and concise functional specifications,user

stories, and acceptance criteria.

* Trained end users on different business scenarios and prepared user procedure manual.

**Functional & Configuration Skills:**

* **Data Analysis and Customer Profiling:** Utilized machine learning models to analyze customer demographics, preferences, claim histories, and financial data. Combined this data with insights from similar customer profiles using Neo4j’s graph database to map relationships and dependencies.
* **Customer Interaction Modeling:** Built a graph schema in Neo4j to represent customers, policy

types, endorsements, and past interactions. By traversing this network, the system identifies trends

and preferences.

* **Recommendation Generation:** Deployed Cypher queries to extract meaningful insights and policy types.This allowed tailoring policy recommendations to match customer-specific needs, increasing policy adoption rates.

**Client: Aetna-Cheese Cake Factory July 2021– Dec 21 Role: Neo4j Developer**

**About Client:**

The Cheesecake Factory collaborates with bswift for seamless employee benefits and health plan management.

**Responsibilities:**

* Gained foundational skills in Cypher query language and Neo4j data modelling under mentorship, completing hands-on training in graph database management.
* Developed programming skills in Python, supporting tasks within larger projects and assisting

team members with data transformation and integration.

* understanding data flow and architecture principles, gaining insights into end-to-end project life cycle
* Well-versed in Neo4j, a graph database, for managing and querying complex, interconnected data structures. Experienced in creating and optimizing data models in the insurance domain.
* Participating in code reviews, testing, and quality assurance activities to ensure the reliability and robustness of our solutions.

# EDUCATIONAL BACKGROUND

* B.E. Computer Science Engineering –KVCET,Chengalpattu
* Databricks Certified Data Engineer Associate.
* Certified Microsoft Azure Data Fundamentals.