

Kamal Preet Singh

AI & Data Engineering — Snowflake — Cloud Analytics

India — Open to Global Opportunities

Email • LinkedIn • GitHub • kpsingh.in

Research Impact: 400+ Citations • 6 Published Patents

PROFESSIONAL SUMMARY

AI and Data Engineering professional with international enterprise experience across Australia and India. Specialized in Snowflake-based data warehousing, Talend ETL orchestration, and scalable SQL-driven data transformation pipelines.

Delivered enterprise analytics solutions for organizations including HCF Insurance and Betfair, enabling automated data workflows, improved reporting reliability, and scalable cloud analytics platforms. Combines enterprise data engineering expertise with a strong machine learning research profile (400+ citations and 6 published patents).

CORE SKILLS

Data Engineering: Snowflake Data Warehousing, Talend ETL, Data Pipelines, Oracle-to-Snowflake Migration

Programming: Python, SQL

Cloud Platforms: AWS, Microsoft Azure

Machine Learning: NLP, Deep Learning, Feature Engineering, Model Evaluation

Analytics Tools: Power BI, Tableau

PROFESSIONAL EXPERIENCE

Data Engineer / Data Analyst

Aug 2022 – Aug 2023

HCF Insurance, Sydney, Australia

- Designed and implemented Snowflake ETL pipelines processing 10M+ healthcare records supporting enterprise analytics and reporting systems.
- Built scalable SQL transformation pipelines powering analytics dashboards used for marketing insights and compliance reporting.
- Automated Talend ETL workflows reducing manual data processing and improving reporting reliability.
- Contributed to modernization of enterprise data platforms supporting large healthcare data environments.

Associate Data Consultant

Feb 2022 – Jun 2022

Servian, Melbourne, Australia

Client: Betfair

- Developed SQL transformation pipelines processing high-volume betting platform datasets for enterprise analytics.
- Implemented Talend ETL workflows supporting production data pipelines and large-scale Snowflake migration initiatives.
- Built production pipelines supporting Oracle-to-Snowflake data warehouse migration initiatives.
- Managed Snowflake warehouse environments and optimized data warehouse query performance.

Data Analyst

Dec 2021 – Jan 2022

Kepler Analytics, Melbourne, Australia

- Built data pipelines transforming operational datasets used for business intelligence reporting and analytics dashboards.

- Developed BI data models supporting real-time reporting dashboards and decision-support tools.
- Documented transformation rules and analytics workflows supporting enterprise data teams.

Research Data Analyst (Intern)

Jul 2021 – Nov 2021

Melbourne Data Analytics Platform, University of Melbourne

- Developed Python-based machine learning pipelines for NLP and analytics research projects.
- Assisted across the full research lifecycle including data preprocessing, modeling, and visualization.

TECHNICAL PROJECTS

Rumour Detection and Analysis on Twitter

- Developed a deep learning model analyzing 100K+ tweets to classify rumor vs non-rumor content.
- Applied NLP techniques to analyze large-scale COVID-19 misinformation datasets.

Parallel Tweet Analysis using MPI

- Implemented distributed tweet analysis system using MPI on SPARTAN HPC cluster.
- Evaluated performance across multiple SLURM resource configurations.

GovHack 2020 Data Challenge

- Built predictive analytics model using Australian government open datasets.
- Received Honourable Mention for analytical insights.

EDUCATION

Master of Information Technology (Artificial Intelligence)

University of Melbourne, Australia

2021

Master of Engineering (Computer Science & Engineering)

PEC University Chandigarh, India

2013

CERTIFICATIONS

AWS Certified Cloud Practitioner

Microsoft Azure AI Fundamentals

Microsoft Azure Data Fundamentals

Splunk Fundamentals

NPTEL Elite Certification (Top 1%) — Joy of Computing Using Python, IIT Madras

ACADEMIC EXPERIENCE

Assistant Professor — Artificial Intelligence, Machine Learning, and Data Science