**Shahwar Saleem**

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**Education**

**University of Waterloo, ON, Canada** May 2016 – Aug 2018

M.Eng. Computer Science, Mathematics

GPA: 89%

**University of Engineering and Technology, Lahore, Pakistan** Sept 2009 – June 2013

B.S Electrical Engineering, Computer Engineering

GPA: 3.4%

**Work Experience**

**Ripple, Canada**

Senior Software Engineer – MLOps November 2022 – present

* Led the migration of the team’s Databricks workspace from GCP to AWS, successfully transferring dozens of machine learning models and hundreds of historical experiment records.
* Designed and built a reusable, Python-based ML platform package for Databricks, now adopted organization-wide to streamline model development and deployment.
* Defined the versioning strategy and implemented a continuous delivery pipeline for the ML platform package.
* Pioneered and maintained generalized data pipelines supporting multiple teams, enabling scalable and consistent data workflows.
* Foster a strong team culture by facilitating design reviews and leading agile ceremonies including retrospectives, sprint planning, and backlog grooming.

**Arctic Wolf, Canada**

Senior Software Engineer January 2022 – November 2022

* Led requirements gathering and design sessions for the ML platform, focusing on Arctic Wolf’s unique data analytics-driven use cases.
* Designed illustrative examples and implemented two proof-of-concept (PoC) projects to evaluate and benchmark tools within the ML platform ecosystem.
* Spearheaded the deployment of Kubeflow and Flyte in the development environment to assess scalable and production-ready ML orchestration solutions.

**RBC Borealis, Canada**

Software Development Engineer Intern July 2019 – January 2022

* Designed and implemented an ETL and reverse ETL-based data access platform, simplifying data retrieval to a single API call for Spark DataFrames in Parquet format on S3, reducing access time from hours to seconds.
* Deployed Delta Lake on an on-premises cluster to optimize performance and packaged it into a Python solution for ML teams.
* Led the design, versioning, and release management of the platform to ensure efficient data access and a streamlined user experience.
* Spearheaded the creation of a unified data access platform that enabled faster ML pipeline onboarding and real-time integration of synthetic and real credit card data.
* Reduced ML pipeline onboarding time from weeks to days and improved time-series data retrieval through Delta Lake, cutting access latency from hours to seconds.

**Pronavigator, Canada**

Senior Software Engineer August 2018 – June 2019

* Designed and implemented a Neural Network-based Natural Language Understanding (NLU) engine to replace the existing SVM-based engine, improving response times by 100x and reducing server costs by thousands of dollars per month.
* Developed a custom accuracy evaluation tool using the Confusion Matrix technique, tailored for text classification, which uncovered key flaws in the existing data cleaning pipeline.
* Revised and documented the data cleaning process, equipping Data Analysts with a framework to evaluate data from the NLU engine’s perspective before labeling.
* Achieved a 10–15% improvement in NLU model accuracy by enabling more context-aware and precise labeling based on confusion matrix insights.

**Activities and Projects**

**University Tutoring** Sept 2016 – June 2019

* Tutored undergraduate students in Math and Computer Science

**IEEE Intelligent Vehicle Symposium Paper** June 2018

* An Automated Vehicle Safety Concept Based on Runtime Restriction of the Operational Design Domain

**Technical Skills**

Languages: Python, Java, C, Golang

Operating Systems: Linux, Mac OS

Tools: Databricks, Flyte, Kubernetes, AWS, Terraform, Spark, CICD

**Awards**

1. Secured 100% Scholarship from University of Waterloo for Masters in Engineering 2016-2018
2. Secured 100K PKR Scholarship from Government of Pakistan based on HSSC exam results.