Ramtin Alikhani

[GitHub](#) | Ramtinal1995@gmail.com | [LinkedIn Page](#)| [My Web Portfolio](#)

Skills

Programming Languages: Python (Pandas, Seaborn, Matplotlib, Plotly, Panel Panes, OpenLM, BeautifulSoup)

Data Analysis: MS Excel (Pivot Tables, VLOOKUP, XLOOKUP, Functions, Conditional Formatting, Dashboards)

Databases: InfluxDB, SQL (MySQL)

Visualization & Reporting: Microsoft Power BI, Tableau, AWS Quicksight, Google Looker

Testing & Data Validation: Data Normalization, Data Cleaning

Project Management: SCRUM, Agile, Atlassian Confluence, JIRA

Cloud: Amazon (S3, Athena, Glue, Quicksight), Microsoft Azure (Data Studio, Data Factory, Synapse)

Pipeline Tools: CI/CD, Jenkins

Version Control: Git, Github, Gitlab, SVN

Other Skills & Tools: Parquet, JSON, CSV, Scala

Projects

World Layoffs Data Cleaning, Personal Project – Mississauga, ON   January 2025

- Utilized **MySQL** to clean and optimize a dataset of 2,361 records by removing 100% of duplicates and irrelevant rows through **partitioning**, **filtering**, and **row-number** techniques.
- Standardized 15+ industry categories and corrected 50+ inconsistent entries using **string manipulation** (Trim, Update, and Case statements) to ensure data accuracy.
- Transformed 2,300+ text-based dates into proper date formats with STR_TO_DATE and altered table structures to enable seamless time-series analysis.

Customer Data Cleaning, Personal Project – Mississauga, ON   January 2025

- Cleaned and standardized a dataset of 1,020 customer records using **Python** and **Pandas**, removing 100% of duplicates, null values, and inconsistent entries across multiple columns.
- Transformed 300+ phone numbers into a uniform format using **regex** and **Apply**, and split multi-part addresses into three separate columns (Street, State, ZIP) for improved usability.
- Standardized categorical values in 2 columns (e.g., "Paying Customer" and "Do Not Contact") and dropped irrelevant columns, reducing dataset size by 10% while preserving key insights.

Data Professional Survey Analysis, Personal Project – Mississauga, ON   January 2025

- Cleaned and transformed a dataset of 630+ survey records, consolidating 50+ job titles into 7 standardized categories for accurate analysis.
- Parsed and averaged 100+ salary ranges into numerical values, improving usability for visualization in **PowerBI.**
- Created 5+ interactive visualizations (**bar charts, tree maps, graphs**) to analyze trends in job satisfaction, salaries, and programming language preferences.

Engineering Capstone, Conestoga College – Cambridge, ON   January 2021 – August 2021

- Designed a wireless monitoring system for industrial equipment, processing live sensor data from 10+ parameters (e.g., humidity, temperature) via Bluetooth.
- Developed a **Python**-Django backend connected to a **MySQL** database handling large records of data, achieving real-time data visualization with **Looker Studio.**
- Reduced data retrieval times by 20% through **SQL query optimization** and **indexing** techniques.

Professional Experience

Automation Engineer, MDA Space – Montréal, QC   November 2023 – May 2024
- Automated project tracking by developing **Python scripts** with the Atlassian-Jira library, correcting 20+ misassigned tasks and subtasks weekly, ensuring data accuracy and streamlined workflows.
- Designed Python-based license optimization scripts with an **OpenLM** wrapper, analyzing 50+ software licenses and servers to reduce costs and improve resource allocation.
- Implemented a **Jenkins-integrated Python solution** to detect and alert for **duplicate Confluence templates**, improving documentation efficiency and reducing manual review time by 30%.
- Developed and unit-tested scripts in C# and **Python**, leveraging **Pytest** to ensure robust automation for software tools used by engineers.

Data Engineering Consultant, Adastra Corporation – Markham, ON   January 2022 – June 2023
- Optimized **ETL** pipelines processing **big data** monthly for Rogers Bank using **Azure Synapse** and **SQL**, increasing processing speed by 35%.
- Automated data ingestion processes in **Azure Databricks**, reducing manual intervention by 50% and improving workflows by 65%.
- Supported Azure Databricks operations by developing **custom notebooks** and **clusters**, streamlining data ingestion workflows.
- Populated tables with **SQL scripts** for comprehensive testing and validation.
- Conducted **root cause analysis** and **error tracking** for data failures, resolving critical bugs and increasing system reliability by 75%.
- Conducted training sessions for junior consultants on **Azure Data Factory** workflows, improving team proficiency by 30%.

Embedded Systems Software Co-op, Ciena – Ottawa, ON   August 2021 – December 2021
- Improved system performance by debugging and optimizing scripts for deployment using in-house build tools.
- Contributed to team retrospectives, identifying process inefficiencies that reduced sprint carryover by 20%.
- Utilized Docker for image creation, reducing build times by 10%.
- Developed automated scripts for configuration file updates, reducing manual effort by 30% in deployment processes.

Software Developer Co-op, Maerospace – Waterloo, ON   August 2020 – December 2020
- Designed and deployed 10+ **Python** and **Bash** scripts to ingest and process 500MB+ daily time-series data from **InfluxDB**, improving data extraction efficiency by 30%.
- Created Python and Bash scripts for automating **data pipeline** tasks, reducing manual intervention by 20%.
- Converted legacy **Perl** scripts to Python, enhancing performance by 15% and aligning with modern development standards.

Software Developer Co-op, Blackberry/QNX – Ottawa, ON   May 2019 – August 2019
- Automated over 50 regression test cases for OpenSSL using **Python**, reducing manual testing time by 40%.
- Developed Python scripts with advanced **regex** to **parse** and **analyze** test results from large datasets, improving debugging efficiency by 25%.
- Managed nightly **Jenkins** test runs, integrating over 30 test cases and ensuring 20% error-free SCP file transfers across servers.
- Conducted code reviews for scripts weekly, achieving an 80% code acceptance rate within **Agile** team workflows.

Education

Conestoga College – Electronics Systems Engineering, Bachelor of Engineering   December 2021

Certifications & Training

Data Analyst Bootcamp - Alex The Analyst   Jan 2025
Learning Excel: Data Analysis - Linkedin Learning   Dec 2024
Data and Health Indicators in Public Health Practice - Johns Hopkins University, Coursera   Ongoing