

Akshay Palli

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WORK EXPERIENCE

Scotiabank (Bank of Nova Scotia)

Creditor Insurance Advisor

Aug. 2022 – Present

Toronto, ON, Canada

- Consistently **exceeded quarterly targets by 90%**, enhancing overall satisfaction, resolution, and retention, demonstrating aptitude for leveraging **analytical and communication** skills for **deriving impactful insights**.
- Collaborated across teams, **interpreting** call volume and survey **data** to develop digital campaign strategies, **leading to a 30% reduction in wait times**, showcasing **data-driven strategic decision-making**.

[The Wania Group](#), University of Toronto

Research Analyst

Sept 2020 – Dec 2021

Toronto, ON, Canada

- Proven experience in **predictive modelling**; developed **multilinear regression** models for environmental-risk assessment achieving R^2_{adj} **0.94**, RMSE **6.48**, and MAE **4.35**, surpassing **prior models by 15%**.
- Engineered features by leveraging domain insights, refining models to 2 features from 6, boosting **performance metrics by 15%-20%**, demonstrating skill in efficient feature selection and model optimization.
- Developed a **Python pipeline** to standardize experimental data from academic sources, enhancing access. Cleaned 3000+ records, **creating a database** for efficient future research, **improving efficiency by 90%**.
- Published [original research](#) in 12 months** as a first author in a reputable scientific journal, showcasing a distinguished proficiency in conducting high-caliber academic research.

[Clean Energy Lab](#), University of Toronto

Machine Learning Research Intern

May 2020 – Aug 2020

Toronto, ON, Canada

- Investigated strategies (transfer learning, DiffPool, Batch Normalization) to improve a convolutional **graph-based neural networks** for materials property prediction (CGCNN) with emphasis on Li-ion battery materials.
- Developed **Python** scripts for **automating** the alteration of molecular data in crystal structures for solar cells research, improving **data pre-processing time by 40%**, demonstrating **knowledge in programming**.

Sanofi Pasteur

Quality Control Co-op Student

May 2019 – Apr 2020

Toronto, ON, Canada

- Revamped monthly expenditure tracking using VBA, **boosting efficiency by 60%**, demonstrating data manipulation expertise crucial for **generating actionable insights**.
- Effectively **communicated analytical results** in department meetings, to **business stakeholders** and boosted **understanding by 60%**, mirroring the data-driven communication skills essential for a Data Scientist.
- Deployed **process workflow maps**, enhancing organizational **efficiency by 15%**, showcasing proficiency in **structuring and optimizing processes**.

EDUCATION

Georgia Institute of Technology

Micro Masters (EdX), Data Analytics

Aug 2023

Remote (Atlanta, GA, USA)

University of Toronto

H.BSc, Environmental Chemistry

June 2021

Toronto, ON, Canada

PROJECTS & PUBLICATIONS

- UFC (Ultimate Fighting Championship) Recommender System [View Repository](#)
 - Developed a personalized UFC Recommender System, leveraging fighter metrics (keywords, PCA, extract recommendation, cosine similarity) and user preferences to curate top 5 fighter recommendations, facilitating easy entry into the captivating realm of MMA.

- Baskaran, S., Podagatlapalli, A., Sangion, A. et al. Predicting the Temperature Dependence of the Octanol–Air Partition Ratio: A New Model for Estimating ΔUOA . J Solution Chem 52, 51–69 (2023) [View Publication](#)

SKILLS

Languages: Proficient: R (ggplot2, tidyverse, dplyr), Python (Pandas, Matplotlib, NumPy, sklearn), SQL
Tools: MS Word, MS Excel, Visual Studio, R-Studio, PostgreSQL, Tableau, Linux, Git,
Key Skills: Data Analysis, Data Visualization, Machine Learning (PCA, CGCNN, Linear Regression, Recommender Systems), Data Mining, Technical Writing, Communication, Conflict Resolution