

Uday Kurien

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CAREER OBJECTIVE

Motivated atmospheric data analyst with an excellent academic track record, pivoting from academia into industry. Will transfer analytical acumen and technical competencies from research to corporate settings. Ready to meet and exceed stakeholders' expectations via decisive, timely and goal-oriented actions.

SKILLS

Databases Used: MySQL, Teradata, PostgreSQL

Analytical/BI Tools: Advanced MS Excel (Pivot Tables, VLOOKUP, Index Match), Tableau, SigmaPlot, IBM Cognos, Google Sheets

Analytical & Visualization Libraries: Python (Pandas, Matplotlib, Seaborn, Plotly, Requests)

Office & Productivity Tools: MS Office Suite, LibreOffice Suite

Command Languages: Bash, Zsh

Operating Systems: Windows, GNU/Linux (Advanced)

Technologies: Versioning - Git/Github, Remote access – ssh, sshfs

Data formats: CSV, JSON, NetCDF

Languages: English, Hindi

EXPERIENCE

Data Analysis Projects (Course Projects & Self Motivated) | Toronto, Canada (2022 - 2023)

- **House pricing predictions** (Excel)
Modelled housing prices via multiple linear regression to assist customer decision making. Ensured independence of explanatory variables and encoded categorical variables. Evaluated fit according to R^2 values, and confidence with p-values
- **Analysis of customer and sales data** (Tableau, SQL)
Used tableau and SQL to filter and investigate customer and sales data at various levels of aggregation, to improve customer retention and advise marketing strategies
- **Ranking in-demand technical skills for data analysts from scraped job boards** (Excel, SQL, Python)
Built a python web crawler to autonomously scrape data analyst job listings from Indeed.ca. Ranked essential technologies by their frequency of occurrence. Used rankings to decide which technologies to specialize in
- **Dashboarding twitter sentiment analysis** (Python)
Scraped tweets using Twitter's API, analyzed tweet sentiments using pre-trained NLP model RoBERTa and computed descriptive statistics on tweet parameters (sentiment score, language, device tweeted from etc.). Presented results in an interactive dashboard. Used results to obtain insights into our reactions to world events

Research Associate | McGill University, Montreal, Canada (2018-2021)

Automation (50%)

- Managed concurrent execution of 300 numerical models on Compute Canada's cloud services
- Automated computation of model parameters and creation of configuration files
- Automated job submissions, and data retrieval, backup and integrity tests

Data Analysis (50%)

- Performed data entry, cleaning, and visualization with Google Sheets
- Analysed the data to derive insights into mechanisms of rain formation

Communication

- Served as primary point of communication between colleagues at McGill University and collaborators at the National Centre for Atmospheric Research, USA

- Presented updates at weekly group meetings
- Technology transfer to incoming students

Research Assistant | McGill University, Montreal, Canada (2012-2018)

Laboratory Research (33%)

- Performed laboratory research in environmental chemistry

Data Analysis (33%)

- Verified the precision of the data with statistical methods
- Modelled experimental data via linear regressions
- Analysed and visualised data with MS Excel and SigmaPlot
- Analysed and visualized multi-year satellite and meteorological data with MATLAB

Communication (33%)

- Reviewed and summarized data from scientific literature
- Published data driven insights into chemical processes
- Presented regularly in meetings and national conferences
- Advised undergraduate/graduate students in their work
- Collaborated with researchers and technicians in other facilities and universities

Research Consultant | The Energy & Resources Institute, India (2010-2012)

- Worked collaboratively with the University of Glasgow on sustainable technologies

PROFESSIONAL DEVELOPMENT

Data Analysis MOOCs (2022 – 2023)

- **IBM Data Analyst Professional Certificate** ([Coursera, IBM](#))
9 course professional certificate
Key Topics: Application of Excel, SQL and Python to trend analysis and dashboarding, concluding with a capstone project
- **Excel Skills for Business Specialization** ([Coursera, MacQuarie University](#))
4 course specialization
Key Topics: Complex spreadsheet calculations, data validation, automation, conditionals, lookups, dashboarding
- **PostgreSQL for Everybody Specialization** ([Coursera, University of Michigan](#))
4 course specialization
Key Topics: Advanced SQL queries, ER diagrams, SQL & NoSQL approach to database design, regex
- **Python 3 Programming Specialization** ([Coursera, University of Michigan](#))
5 course specialization
Key Topics: Basic data structures, functions, list comprehensions, lambda expressions, exception handling, object-oriented programming, using web APIs
- **Business Statistics and Analysis Specialization** ([Coursera, Rice University](#))
5 course specialization
Key Topics: Measures of central tendency, statistical distributions, hypothesis testing, confidence interval estimations, linear regression including categorical variables

EDUCATION

Degrees

- Ph.D. in Atmospheric & Oceanic Sciences, McGill University, Canada (2019)
(Coursework in applied physics, co-authored 8 publications in environmental science)
- M.Sc. in Chemistry, Delhi University, India (2010)
- B.Sc. (Honours) in Chemistry, St. Stephen's College, India (2008)