ROLA DALI, PHD

Data Wrangler

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📍 **Montreal, Canada**

SUMMARY

Data wrangler, software developer and problem solver: a research scientist by training, I use various tools to extract actionable information from data.

EXPERIENCE

Bioinformatics Specialist – Tech. Dev. Team

Canadian Centre for Computational Genomics (C3G)

📅 2017 - Ongoing　　📍 Montreal

C3G is a research entity that provides tool development and data analysis for genomic researchers.

- Developed 3 End-to-End analysis pipelines in 30% of the expected time (Python, R, WDL)
- Automated testing and resource monitoring using Jenkins freeing up valuable team time
- Analyzed hundreds of datasets for several international projects around the globe
- Established training workshops twice a year at C3G: helped hundreds of academics in learning how to quality control, process and visualize data

PhD candidate in NeuroScience & Bioinformatics

McGill University, Computer Science Department

📅 2011 - 2017　　📍 Montreal

- Developed RobusTAD, a tool to analyze DNA 3D structure
- Designed, conducted and analyzed experiments to understand brain development and disease
- Developed software tools for collaborators to view and analyze data
- Met regularly with team members and collaborators to present and explain findings

Research Intern

Palmerston North University

📅 2010 - 2010　　📍 New Zealand

- Analyzed data in the laboratories of Dr. Barry Scott and Dr. Murray Cox to understand the relationship between fungus and plants, which is important for New Zealand's economy

Research Intern

University of Ottawa

📅 2009 - 2010　　📍 Ottawa

- Collected & analyzed Data in the laboratory of Dr. Mona Nemer, **current Chief Science Advisor of Canada**, to understand heart development & disease

ACHIEVEMENTS

🎖 **Top Performer**
- Rated "Exceptional" in annual review

💎 **Academic Research & Open Source contributer**
- Co-authored 16 scientific articles (Dali R in Pubmed, BioRxiv, and arXiv)
- Contributed to several Open source Code bases: RobustR, GenPipes, MultiQc, HiCUP

💡 **Thinker**
- Ranked in top 10% in Canadian national competitions

📈 **Productive & Efficient**
- Passionate problem solver that completes projects in a fraction of the allocated time

STRENGTHS

🛠 Organized Modular Solver
- I am very good at debugging problems by breaking any issue into smaller, more manageable pieces. Thus, I am not easily intimidated by new tasks

👥 Communication Skills
- Good communicator: able to extract & convey information effectively

👁 Eye for detail
- Detail oriented, consistent processing & execution

📂 Experienced Writer
- Very Good at writing data analysis reports & project grants

EXPERIENCE

Research Intern
University of Ottawa
📅 2008 - 2009   📍 Ottawa
- Collected & analyzed data in the laboratory of Dr. Rees Kassen to understand bacterial and fungal evolution

SELECT PROJECTS

Insurance Estimator using Montreal Fire Department Data
Built an insurance pricing estimator based on estimating fire risks across Montreal
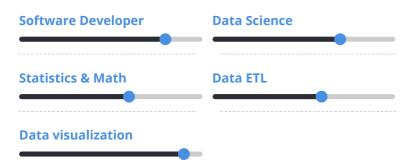
Computer Vision: arithmetic operations
Developed a Feed Forward Neural Network using Keras to identify and solve arithmetic operations in images

Language Classification by Character Freq.
Developed a Random Forest classifier that can predict language based on character frequency
- Scraped various Reddit pages in different languages and used NLP to clean and extract language features
- Tested and trained several different classifiers using SciKit Learn

INDUSTRY EXPERTISE

Software Developer

Data Science

Statistics & Math

Data ETL

Data visualization

FIND ME ONLINE

GitHub
www.github.com/rdali

Personal Site
https://rdali.github.io/

LinkedIn
https://www.linkedin.com/in/rola-dali-phd-63b7133a/

SKILLS

Software & Coding

Python   **R**   **Java**   **Bash**   **SQL**

HPC/Cloud   **git/Jenkins**

Data Wrangling

Quality Control   **Data Analytics**

Pipeline Development

Data Visualization   **Math & Statistics**

Large Data

EDUCATION

Certificate in Data Science and Machine Learning
McGill University
📅 2018 - 2019

GPA
4.0 / 4.0

PhD in Neuroscience & Bioinformatics
McGill University
📅 2011 - 2017

GPA
4.0 / 4.0

Honors & specialization in Biochemistry
University of Ottawa
📅 2006 - 2010

GPA
9.8 / 10

MY LIFE PHILOSOPHY

"We are what we repeatedly do. Excellence, then, is not an act, but a habit."