# David O'Connell - Résumé

Nationality Irish, Canadian Mobile Phone +44 7380 152146

LanguagesEnglish, FrenchEmaildavid.oconnell.tcd@gmail.com

## **Personal Profile**

Resourceful and self-motivated programmer with a focus on data science and machine learning. Technologically-curious, creative and resourceful in problem solving. Always seeking opportunities to optimise existing systems and gain practical insights from real world data exploration.

### **Education**

2021 - 2023 MSc Data Science

Anglia Ruskin University, Cambridge, UK

Degree Focal Points Exploratory Analysis

**Machine Learning Techniques** 

Big Data

Non-Linear Time Series Analysis Deep Learning and Neural Networks

2010 - 2014 Honors BA Nanoscience; Physics and Chemistry of Advanced Materials (NPCAM)

Trinity College Dublin, Dublin, Ireland

Degree Focal Points Nanoscience

General Principles of Physics and Chemistry Semiconductor Theory and Fabrication Physical and Solid State Chemistry Thin Film and Materials Physics

# **Employment History**

Oct 2021 - Charles River Laboratories, Chesterford Park, Little Chesterford, Saffron Walden, United Kingdom Present Technical Specialist II - Compound Management Group, Analytics

- Managing the high-throughput analysis of chemical compounds and extracting insightful trends found in ongoing and historical projects, via SQL and Power BI.
- Creating scripting tools for data cleaning using python and analysing and reformatting using the Pandas package.
- Developing data pipelines between data sources using Linux servers (RedHat).
- · Training new analysts and chairing weekly update meetings.

Mar 2020 - NuChem Sciences, 2350 Rue Cohen, Ville Saint Laurent, QC, Canada

Aug 2021 Instrument Analyst

- Performing quality control analysis using self-made Python APIs to interface with proprietary Agilent Software and extract insight into long term system performance.
- Performing data cleaning, wrangling, and aggregation (Python with Pandas) for budget forecasting and providing detailed analysis of savings and costs with visualisation.
- Monitoring, optimising and maintaining all lab instruments, company wide, including UPLCMS, lyophilisers, and flash chromatographers.

**Apr 2017 -** KABS Laboratories, 4500, De Tonnacour, Saint-Hubert, QC, Canada *Instrument Analyst* 

- Operating, scheduling and maintaining up to 40 HPLC instruments.
- Data calibration, integration and report generating for regulatory clients.
- Rigorously adhering to FDA, Health Canada, British and European pharmacopoeia standards.

## **Software and Programming Skills**

Programming Languages

Python 3.X SQL Bash

#### Frameworks and Libraries

Data Science: NumPy, Pandas, Matplotlib Machine Learning: SciKit Learn, Tensorflow, Keras

Databases: OracleDB, PostgreSQL, SQLite

Distributed Systems: BigQuery, ApacheSpark, PySpark

Enterprise: Power BI, Excel, Power Automate, Powerpoint, Word

OS: Linux, Windows, MacOS

### **Interests**

- Programming
- Ice Hockey, Running, Cycling, Skiing, Hiking
- Reading
- Travelling
- Gardening

### Referees

Available on Request