CONTACT

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TECH STACK

PROGRAMMING:
Python (Pandas, NumPy, matplotlib, json, scikit-learn), R (ggplot2, dplyr, knitr), R-Markdown, SQL, MySQL, XPath, XQuery and XSLT, Perl, Visual Basic for Applications (VBA), LaTeX, HTML, CSS

APPLICATIONS: Microsoft Office, Excel, Google Drive, RStudio, Spyder, Visual Studio Code, GitHub, CircleCI, BigQuery, Clickup

OS/ENVIRONMENTS:
Windows, Linux, Unix, Mac

LANGUAGES

English (native)
Spanish (advanced)
German (basic) – A2.2

EMILY TAYLOR, PhD

DATA SCIENTIST ◆ DATA ANALAYST ◆ PROJECT MANAGER

Data professional with 10+ years of professional and academic experience exploring and visualising data, finding patterns and quantifying insights.

Works in Python and R, with skills in statistical analysis, predictive modelling and data wrangling.

Likes asking questions, understanding the problem and needs of a project and then translating them into a data oriented solution.

Looking to join a collaborative team in Berlin. Open to and enjoys learning new methods.

WORK EXPERIENCE

LEAD RESEARCHER **May 2019 – May 2020**

Sourcingbot.com, Berlin

- Took ownership of entire data normalization pipeline – cleaned and restructured data of over 5 million parts.
- Conducted statistical analyses of predicted electrical parameters.
- Wrote and ran complex SQL queries to match and verify 1000s of equivalent parts in the sourcingbot database on BigQuery. Became the go-to person for extracting data from BigQuery
- Coded and implemented batch processing of capacitor calculations and their graphical results in Python.
- Wrote and added functions, contributing to a mature repository of Python code.
- Ran unit tests to test and verify changes to data.
- Used github and CircleCI, interacting daily between the front and back-end developers.
- Introduced quality control processes to data handling from raw input to front-end.
- Independently communicated research team progress to investor.

MATERNITY LEAVE AND CONTINUED SKILL DEVELOPMENT **May 2016 – May 2019**

India and Germany

A career break due to maternity leave, focused on maintaining and enhancing my skill set. Relocated to Berlin, Germany from Bangalore, India.

Undertook the John Hopkins University Data Science Certification composed of ten courses including: R Programming, Getting and Cleaning Data, Exploratory Data Analysis, Reproducible Research, Statistical Inference, Regression Modelling and Machine Learning. Project submissions can be viewed on **etay203.github.io/projects**

OPEN SOURCE

WiMLDS (Women in Machine Learning and Data Science) Berlin: Co-organiser since it was founded January 2019. Supported its rapid growth to 1000+ members, organizing monthly events in Berlin, including Berlin's first scikit-learn open source sprint. Recently hosted and moderated several online zoom meetings for large groups collaborating with WiMLDS Paris as well as a panel discussion.

ASSOCIATE SCIENTIFIC CONSULTANT **June 2012 – May 2016**

Galson Sciences Ltd. (GSL), USA and India

Independently managed and supported a range of nuclear decommissioning and radioactive waste management projects for both UK domestic and international clients.

Developed prediction models, coded programs and wrote reports to support environmental impact and risk assessments.

Worked remotely on projects for GSL whilst relocating internationally. Lived in San Francisco USA before moving to Bangalore India. Further examples of my contributions given below.

SCIENTIFIC CONSULTANT **Sept 2009 –June 2012**

Galson Sciences Ltd. (GSL), Oakham UK

- Excellent knowledge of MS Excel and VBA/Macro having coded, tested and implemented a bespoke computational tool – enabled the client to quantify and predict radioactive doses for environmental assessments.
- Developed and coded a statistical analysis tool - optimized strategies for monitoring and inspection by waste store operators. The tool enabled different sites to plan and tailor their most efficient schedule for monitoring and inspecting waste canisters.
- Documented data analysis tools with data dictionaries and user manuals as well as, demonstrating and presenting to clients.
- Designed and built a large relational database from scratch - established data integrity ensuring government compliance by tracking lists of design features, events and processes. Made the process reproducible and saved the client time.
- Assessed values for landfill sites accepting solid-low level radioactive wastes. Surveyed types of waste, reported the range and quality of the corresponding data available, proposed best estimates and discussed revision of parameters with the Environment Agency.
- Presented complex data to non-technical audience as easy-to-interpret graphics and reports. Demonstrated compliance with nuclear safety regulations.

EDUCATION

PhD, Atomistic Simulations of Radioactive Tolerant Materials **2005 - 2009**

developing predictive models to better understand the structure and behaviour of ceramic materials for radioactive waste applications.

Department of Materials, Imperial College, London

MEng, Materials Science and Engineering **2000 - 2005**

Upper second class honors, with one year placement at CENIM, Madrid 2002-2003

Department of Materials, Imperial College, London