

PROFILE

ioakeim is a self-taught programmer with [professional experience](#) from reputable organisations in the UK and Cyprus. He is particularly skilled in data transformation and has a robust toolbox that can be applied in various scenarios. His [statistical expertise](#) comes from the social sciences where he consistently used linear models to answer research questions. ioakeim is a [highly motivated](#) individual seeking a challenging role in the data domain.

EXPERIENCE

IT Consultant - Digital Innovation Team, KPMG (CY)

Feb 2022 - Present

Dataset Cleaning for an Insurance Company

- Maintaining and restructuring existing Python code for data cleaning, validation and deduplication.
- [Presenting to client](#) about current status and discussing steps forward.

Data Consistency for the Financial Reporting of a Telecommunication Company

- Comparing System Populations with SAP Accounting using [Microsoft SQL Server](#).
- Importing data from local files, creating tables and performing aggregations.

Development of a Segmentation Tool for an Energy and Petroleum Company

- Maintenance of [ETL Pipeline](#) - extracting and loading data using SQL and Python.
- Constant communication with client about project challenges and solutions.

Recalculation of Revenue for a Forex Company

- Data cleaning using [regular expressions](#), feature creation and table joins with Pandas.
- Communicating data issues to client and requesting feedback on implementation of logic.

Data Preparation and Predictive Analytics for Major Telecommunication Provider

- [Debugging and testing](#) substantial volumes of existing Python code used for pre-processing, model fitting and learning.
- Created a script that leveraged historical data to generate new features, calculating product churn and product switch recursively every three months over a four-year period.
- Developed a rudimentary fbprophet model to assess its potential for [forecasting revenue](#).
- Employed Pandas to construct contingency tables for analyzing product competition among the client and other vendors.
- Evaluated [data quality](#) by producing correlation plots using Matplotlib.

Data Wrangling for the Digital Transformation of a Financial Services Company

- Conducted basic data checks on R-generated data using Microsoft SQL Server.
- Performed [data manipulation](#) tasks such as table joins from CSV files, using Pandas.

Professional Placement - Leadership Team, ONS (UK)

Jun 2021 - Sep 2021

- Used R to [analyse Census data](#) from 2011 and 2021. Decided on suitable variables, cleaned these and produced descriptives that helped senior leadership diagnose potential issues.
- Performed a [literature review](#) about the mental health of veterans in England and provided a concise summary of the main findings using tables and references.

PROJECTS

DataGlitch

Published a [Python package](#) on PyPi catering to the needs of data engineers and analysts. Its primary capabilities include identifying and rectifying mixed data types in columns, handling non-ASCII values, and facilitating dataset exploration.

PROJECTS

Miniseries: Data Engineering for Machine Learning with Python (GitHub)

Missing Data

- Using regular expressions and [visualization techniques](#) to explore missingness.
- Extracting the LittleMCAR function from R with rpy2 to determine the missing mechanism.
- Multiple imputation of missing categorical data using [deep learning](#) (DataWig).

Categorical Data

- Quantifying and reducing cardinality.
- Popular and evidence-based [encoding techniques](#) and potential pitfalls.

TECHNICAL SKILLS

Programming: An experienced Python programmer working with Pandas and Numpy on a daily basis. Good knowledge of scikit-learn and proficiency in other programming languages such as R.

Data Cleaning: Data Accuracy, Missing Values, Outliers, Categorical Data (Cardinality Reduction, Resampling, Encoding), Feature Scaling & Selection.

Machine Learning: Linear Regression, Logistic Regression, Decision Trees, Random Forest, KNN, k-means, PCA, Association Rule Learning, Causal Impact Analysis.

Relational Databases: Integrating SQL with Python to perform CRUD operations and extract data for analysis. Basic knowledge of theoretical concepts such as normalisation and denormalisation.

CORE SKILLS

Communication: Collaborating with colleagues and clients on a daily basis to resolve complex technical issues and develop plans of action. My diverse background has given me a unique perspective on problem-solving, especially in understanding the needs and motivations of individuals. I believe this skillset is highly advantageous in a technical role, allowing me to communicate effectively with both technical and non-technical stakeholders.

Teamwork: I'm adaptable, open to feedback, and prioritize producing clear and efficient work. My creativity and collaboration skills have led to successful outcomes on every project. I value and incorporate the ideas and perspectives of my team.

Problem-solving: As a self-taught programmer, I possess a proven track record of effectively extracting valuable insights from cluttered information. I excel at developing actionable plans to address poorly defined problems, and remain patient and adaptable in the face of unexpected events. My decision-making is always grounded in both evidence and experience, allowing me to consistently deliver optimal results.

EDUCATION

MSc Psychology, Cardiff University

2020-2021

- Developed a thesis that focused on [associative learning](#) in humans. Data were analysed using two one-way Mixed ANOVAs and several Pearson Correlations. Results were compared against previous literature and were discussed in detail.
- Provided [live sessions for master's students](#) who requested support with statistics. Explained theoretical and practical topics and shaped the learning experience according to individual needs and capabilities.
- Critically evaluated interview data using [qualitative analysis](#) techniques. Hypotheses were formed and areas of further investigation were identified.

BSc Sports and Exercise Science, University of Essex

2017-2020

- Designed the methodological procedure of a study, recruited and tested participants in a laboratory, analysed the data collected, [discussed findings](#) and successfully developed a scientific report.
- Presented [evidence-based arguments](#) in front of an audience in a debate with a fellow student. Explored ways to "sell" my ideas and focused on the limitations of the opposition.
- Explored different approaches to [interviewing clients](#) with sensitive health issues. Open-ended questioning, use of affirmations, empathetic and reflective listening were applied with a hypothetical client.