Daniel Vegara

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LinkedIn

Professional experience

KLERE LTD - **Researcher**
Klere is a business transformation and sustainability consultancy providing change management, carbon reduction and ESG strategies.
(Sept 2023 - Present)
- Building algorithms to measure companies' and individuals' biodiversity footprint based on the DEFRA metric.
- Spearheading data analysis procedures to measure the nature impacts of major real estate developers.
- Developing and maintaining an online biodiversity data dashboard using REACT and PostgreSQL.
- Using Python with GeoPandas and ArcGIS for location and habitat data analysis.
- Designing and deploying procedures to quantise biodiversity cost of products from over 100 industries.
- Utilising a variety of data visualisation techniques to present results and convey insights.

TOOLIP - **Co-Founder**
toolip is a consulting and software development company that designs and provides IT solutions to non-profits and SMEs.
(Sept 2020 - May 2022)
- Co-founded toolip to bring digital solutions to companies with social missions and limited resources.
- Built a Python WhatsApp bot designed to automate a variety of processes and database interactions.
- Automated onboarding and assignments for a food donation NGO with 40 volunteers as well as a student led tutoring project which connected over 100 students and teachers.
- Launched a data centralisation platform incorporating Python processes with SQL and Google Drive APIs.

GRAPHEXT - **Data Science Content Creator**
Graphext is an advanced analytics solution to help businesses make better decisions based on data through visual interfaces.
(Jun 2020 - Sept 2020)
- Used NLP and graphing based software to conduct and present multiple data analytics and multimedia projects.
- Worked on communicating complex statistical analysis to a wide audience.
- Presented results in a variety of data visualisation techniques, such as clustering methods and connected graphs.
- Utilised scraping software to produce social media sentiment analysis of diverse topics.

Projects

PERSONAL PROJECTS - **Various**
(Jan 2024 - Present)
- Built a chess AI with TensorFlow using alpha-beta pruning and bitmapping procedures.
- Designed and deployed a portfolio website for a friend using TypeScript and Tailwind CSS.
- Used p5, a "creative coding" JavaScript library, to build a series of multi-neighbourhood cellular automata.

IMPERIAL COLLEGE LONDON - **AI for Game Theory**
(Jan 2022)
- Explored Machine Learning applications in iterated games such as the prisoner's dilemma.
- Designed training and development of an algorithm presented in a tournament against 15 other strategies.

IMPERIAL COLLEGE LONDON - **Profitability of Real Estate attributes**
(Feb 2021)
- Used statistical approaches to find sets of components producing profitable real estate niches.
- Applied different regression models to predict housing prices based on attributes.
- Utilised k-means clustering, PCA and distance based methods to group attributes producing underpriced housing and visually represent these findings.

COLEGIO ESTUDIO - **Fundraising organiser**
(May 2018)
- Took a leadership role in proposing and organising my school's fundraiser for the 2017 Mexico earthquake.
- The event, involving a students against teachers basketball match, raised over €10.000 in humanitarian aid.

Education

IMPERIAL COLLEGE LONDON - **MSci Mathematics**
(Oct 2018 - Jul 2022)
- Master's project combined Statistical Theory and Bioinformatics to find genetic factors in thyroid cancer.
- Modules included Statistical Learning, Methods for Data Science, 'Optimisation, Statistical Modelling, Scientific Computation, Time Series and Numerical Analysis.
- Served as a student representative for Philosophy modules.

Skills
- **Languages**: English (fluent), Spanish (native), Catalan (native), French (B2).
- **Code**: **Python** (NumPy, Pandas, TensorFlow, scickit-learn, Matplotlib, GeoPandas, Tkinter), **R** (ggplot2, knitr, Tidyverse), **web development** (JavaScript, REACT, Three.js, Tailwind CSS, Typescript, Next.js), **SQL**, **Git**, **Excel** and **MATLAB**, as well as some **MS Azure** and **C++**.
- **Software:** **Final Cut Pro**, **Figma** and **DaVinci Resolve**.