



Graduation Certificate

Gonzalo Manrique Sabatel, representing Ironhack Group INC. Sucursal en España
CIF W4009352H whose domicile is C/ Castelló 115B local 7 - 28006 Madrid.

Certifies that

Sergio Pérez Alamillo

has successfully completed the

Data Analytics Bootcamp Madrid March 2020

<ACQUIRED SKILLS>

- Essential Technical & Data Analysis Skills: Command Line, Git, Python, MySQL, statistical analysis, Pandas, Jupyter Notebook
- Advanced Python: Regular Expression; Functional Programming; Lambda, Map, Reduce, and Filter; Error Handling; OOP; Parallelization
- ETL Pipeline - Extract, Transform, Load; APIs and RSS Feeds; Web Scraping
- Exploratory and Storytelling DataViz with Seaborn, Matplotlib, Plotly, Cufflinks, IPyWidgets...
- Inferential Statistics in Python: Hypothesis Testing, Calculating Odds, Bayesian Statistics, Principal Component Analysis...
- Business Intelligence with Tableau
- Supervised & Unsupervised Machine Learning: Feature Extraction and Engineering, Model Evaluation, Pipelines...
- Applied Data Analysis & Machine Learning: Recommender Systems, Survival Analysis, Time Series Analysis, Network Analysis, Text Mining, NLP...

Álvaro López-Cotelo Tallada
General Manager | Madrid

Gonzalo MANRIQUE
Co-Founder | Ironhack