



## 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

# Daniel Tristram

has successfully completed the

**9-Week Data Analytics Bootcamp (October 19 - December 18,  
ACQUIRED SKILLS 2020)**

- Workflow / Tech stack: Command Line, Virtual Environments, Python, Jupyter Notebooks, Git, SQL
- Programming in Python: Data structures, Control Flow, Functions, Modules, Regex
- Python libraries: Pandas, Numpy, Scipy, Matplotlib, Seaborn, BeautifulSoup, Statsmodels, Scikit-learn
- Analytics applications: Web Scraping, APIs, Data Cleaning, Data Visualization, Exploratory Data Analysis, Descriptive Statistics, Statistical Hypothesis testing, A/B testing, Regression, Time-series analysis
- Business Intelligence and stories in Tableau
- Supervised & Unsupervised Machine Learning: Data Cleaning, Data Preparation, Feature Engineering, Feature Selection, Hyperparameter Tuning, Model Evaluation, Predictions, K-Means Clustering, Recommender Systems

**Michael LAND**  
General Manager | Berlin



**Gonzalo MANRIQUE**  
Co-Founder | Ironhack