Ricardo Andrade

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Experience

INESC Technology and Science – Associate Laboratory   **2016–Present**

R&D ENGINEER - ENERGY ANALYTICS AND FORECASTING UNIT

- *Project CORAL - Sustainable Ocean Exploitation: Tools and Sensors*
  Development of a multi-temporal energy management tool for the electricity storage/consumption, complying with the maritime processes energy requirements.

Education

FEUP - Faculdade de Engenharia da Universidade do Porto   **2010–2016**

M.SC. DEGREE IN ELECTRICAL AND COMPUTER SCIENCE ENGINEERING
Specialization in Renewable Energy

- Dissertation - Previsão de Variabilidade de Produção em Centrais Fotovoltáicas [1].
  - Classification: 19 (in a scale of 1 to 20)

Academia de Música de São João da Madeira   **1998–2010**

BEGINNER - ADVANCED MUSICAL EDUCATION & PIANO CLASSES

Awards and Honors

EEM2016 - COMPLATT - Energy Price Forecast Competition   **April 2017**

International competition [2] with the demanding exercise of forecasting the Iberian Electricity Market (MIBEL) hourly spot energy price up to 120 hours ahead. In a rolling basis fashion, forecasts were submitted over a period of 14 days. A weighted mean absolute error metric was used to evaluate the forecasts of each participant.

- Final Classification: 4th place (44 participants at final stage)

INESC TEC BIP - "Fora de Série" / Limelight   **May 2017**

Monthly award that honors collaborators for an exceptional contribution in his/her area of activity. More information available at BIP Bulletin INESC TEC [3].

Languages and Technologies

- Software: PSS/E, Power World, AutoCad, Microsoft Office, PyCharm, RStudio, pgAdmin III, DataStax DevCenter.
- Programming Languages: Python, MATLAB, LaTeX, C++, SQL.
- Technologies: Pandas, NumPy, scikit-learn, statsmodels, TensorFlow, Keras, Matplotlib, Seaborn, Git.
- Natural Languages: Portuguese and English proficient.

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[1] https://repositorio-aberto.up.pt/handle/10216/82786
[2] http://complatt.smartwatt.net/
[3] http://bip.inesctec.pt/en/184/fora-de-serie.html

Publications

1. Andrade, J.; Bessa, R. (2017). Improving renewable energy forecasting with a grid of numerical weather predictions. IEEE Trans. Sustain. Energy 2017, 8, 1571–1580.

2. Andrade, J.; Filipe, J.; Reis, M.; and Bessa, R. (2017). Probabilistic Price Forecasting for Day-Ahead and Intraday Markets: Beyond the Statistical Model. Sustainability, vol. 9, no. 11, p. 1990, Oct. 2017.