

EXPERIENCE

• JungleAI

Lisbon, Portugal

Machine Learning Engineer

May 2018 - Present

- **Machine Learning Modelling:** Researched and implemented a large chunk of Jungle's core approach to predictive maintenance modelling, proceeding the research done during my master thesis. Going through this process I had the opportunity to experiment different modelling strategies like linear regression, autoregressive models, tree based models or recurrent models, using different libraries like scikit-learn, XGboost, LightGBM or Pytorch, among others.
- **Software Development:** Successfully cooperated (leading some of the efforts) in internal software Jungle's codebase research and development phases, from internal tooling to production code. Having been involved, from the conceptualization until the deployment phase allowed me to learn the necessary steps and requirements that a piece of software needs to go through. I was also involved and responsible to implement, deploy and maintain production workflows, for different clients, ranging from data wrangling until model deployments, having the chance to learn technologies like kubernetes, argo, prefect or docker among many others.
- **Data Lifecycle:** Designed and implement various data pipelines, varying from data preparation/cleaning to modelling or until into the calculation of business intelligence metrics for Jungle's clients. These tasks would evolve to understand a variety of data sources, pulling, analyzing, understand, and validate data quality, where data visualization technologies and libraries would be used to facilitate the process. Depending on data size, a distributed framework would be used in the process.
- **Team Lead:** Lead a team where our main goal was the integration of machine learning models with our product and with the deliverables for projects, in terms of machine learning. This task would evolve to manage and plan work schedule and being responsible to meet with other teams leads to plan and align different teams workloads and requirements throughout the week.

Master Thesis Internship

Aug 2017 - May 2018

- **Master Thesis:** "An overview of deep learning strategies for time-series prediction" done as a result of a partnership with Jungle. The main research goal was to study and test the performance of different deep learning models/architectures applied to time series problems, mainly on the area of predictive maintenance and forecasting. This work, done together with the Jungle team, allowed me to be an active member in Jungle's daily projects to establish their technology.

EDUCATION

• Instituto Superior Tecnico - University of Lisbon

Lisbon, Portugal

Master of Science in Electrical and Computer Engineering

Sept. 2015 – Jun. 2018

• Instituto Superior Tecnico - University of Lisbon

Lisbon, Portugal

Bachelor of Engineering in Electrical and Computer Engineering

Sept. 2012 – Jun. 2015

PROJECTS

- **Tecnico Solar Boat:** During the last year of my master, I enrolled in an academic project where our main goal was to build a competitive solar-powered boat. I joined the electrical system team helping in the planning and execution of our first ever prototype. My main responsibilities were the design photovoltaic panels layout and electrical connections.

TECHNOLOGIES & TECHNICAL SKILLS

- **Programming Languages:** Python, Javascript (Beginner)
- **Data Analysis Stack:** Pandas, Numpy, Dask, Scipy, Flask, Ray
- **Machine Learning Stack:** Scikit-learn, XGBoost, LightGBM, Tensorflow, Pytorch, Mlflow
- **Data Visualization:** Holoviews, Bokeh, Seaborn, Matplotlib, Plotly, Grafana
- **Workflow Orchestration/Execution:** Kubernetes, Argo, Prefect, Docker
- **Databases:** PostgreSQL, TimescaleDB, InfluxDB, MySQL