Pierre Palud

PhD in signal and image processing



Looking for an AI researcher position

Experience

- 2024 now **PostDoctoral researcher**, *AstroParticule et Cosmologie (CNRS)*, Paris, France Application and adaptation of statistical inference algorithms to gravitational wave signals, with a focus on the polarization information.
- PhD Candidate (3 years), Ecole Centrale de Lille, Observatoire de Paris, France I worked in a multidisciplinary team involving statisticians and astrophysicists. Our goal was to solve a complex astrophysical inverse problem on star formation and to provide uncertainty quantification along with estimates. We used a fully Bayesian inference approach, and covered all aspects of the inference process including observation model, choice of relevant priors, design of an adequate sampler and physical interpretation of the results. The proposed methods were applied to true telescope observations. We published our results in scientific journals and presented them in conferences, in both signal processing and astrophysics communities.
- 2019 2020 **Data Scientist (18-month VIE)**, Leroy Merlin Brasil, Sao Paulo, Brazil
 As first Data Scientist of Leroy Merlin Brasil, I started by adapting classic ML projects to the needs of stakeholders from various departments such as Marketing and Supply Chain, from proof of concept to production. With the success of these first projects and the growing demand, I founded a Data Science Guild and developed it by training and hiring staff. Our Guild participated in a global Adeo Hackathon to present one of our projects to all Business Units. Projects were led following the Agile framework.
 - 2018 **Data Scientist (4-month Internship)**, *La Redoute*, Roubaix, France Creation of a sales predicting tool to improve La Redoute's dynamic pricing. I implemented a Seq2Seq model using TensorFlow and put it in production on Google Cloud Platform.
 - 2018 **Research Project (6 months)**, *Ecole Centrale de Lille, CRIStAL laboratory* Research initiation with a Machine Learning project applied to X-ray imaging.

Education

2016 - 2019 Ecole Centrale de Lille - BAC+5 (Master level)

Multi-disciplinary engineer degree with specialization in statistcs with both theoretical and practical advanced-level in Machine Learning, signal processing and programming. Courses covering numerous scientific fields, including project management.

2014 - 2016 Classe Préparatoire - BAC+2, Lycée Clemenceau, Nantes

Skills

Programming python (numpy, pandas, sklearn, plotly, pytorch, etc.), Git, shell, LATEX

Data Bases SQL, NoSQL

Soft Communication (oral, written), user centered, team spirit, Agile framework, autonomy

Languages

French Mother Tongue

English Fluent (TOEIC: 975/990)

Portuguese Fluent