Ryan Pégoud

Curriculum Vitae

Montpellier, France
ryan.pegoud@epfedu.fr
GitHub
LinkedIn
Portfolio
Machine Learning Blog/ Medium

EDUCATION

03/2019 - 07/2023 **MEng Data Science Major**, EPF - Ecole d'ingénieur·e·s — Montpellier, France
Expected to graduate with First-Class Honours

09/2015 - 07/2018 **French National Baccalauréat, Scientific Section**, Lycée Privé Nevers — Montpellier, France
High Honours (Mention Bien)

EMPLOYMENT

Academic Appointments

09/2023 - 01/2024 **Part-time Professor**, EPF - Ecole d'ingénieur·e·s — Montpellier, France

Course: Natural Language Processing

Responsibilites: Overhaul the NLP curriculum, conduct lectures and labs, create and grade assignments for M2 students

Curriculum (15h):

- Introduction to NLP and Preprocessing
- Vectorization Methods and Text Classification
- Named Entity Recognition and Part-of-Speech Tagging
- Word Embeddings and Text Similarity
- Sequence-to-Sequence Models and Sentiment Analysis

Industry

02/2023 - 07/2023 **Data Scientist** (Master thesis), BMW Group — Munich, Germany

Master Thesis Title: "*Time Series Based Anomaly Detection For Fleet Connectivity*"

Designed and implemented an Anomaly Detection algorithm based on time series derived features

- Reduced the anomaly detection window from days to minutes and channel dependency from two channels to one
- Deployed a proof-of-concept using Amazon Web Services and PySpark
- Enabled lost data quantification

Implemented a Time Series forecasting model using Meta's NeuralProphet

- Allowed to predict the expected number of user connections for the following days with an average error of 1%

06/2022 - 07/2022 **Data Scientist** (Remote Student Job), CEWE Stiftung & Co. KGaA — Fabrègues, France

Building an Aspect-Based Sentiment Analysis Pipeline

- Designed and assembled an aspect-based sentiment analysis pipeline
- Applied the pipeline to analyze and gain insights from customer feedback in French and German.

Time Series Forecasting with Meta's NeuralProphet

- Achieved a forecasting accuracy of 92% when predicting customer affluence on a 7-day horizon.
- Enabled the HR department to optimize employee schedules based on accurate forecasts.

07/2021 - 01/2022 **Data Scientist** (Bachelor thesis), CEWE Stiftung & Co. KGaA — Oldenburg, Germany

Bachelor Thesis Title: "*Multilingual Text Classification using Transformers*"

BERT Model with Transfer Learning

- Fine-tuned a BERT model using Transfer Learning techniques.
- Implemented temperature scaling to produce calibrated probability outputs, enhancing classification.
- Achieved an F1-score of 93% across 14 classes in 3 different languages.
- Deployed an active learning web application to facilitate efficient data labeling and model training.