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I year, Master's degree
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Dear Sir or Madam,

I am writing to express my interest in joining Ammagamma's *Time Series Forecasting and Text Analysis with LLM* lab. I hold a Bachelor's degree in Econometrics and Data Analytics from the University of Lodz, and I am currently pursuing a Master's in Data Science for Economics at the University of Milan.

Throughout my studies, I have gained solid theoretical and practical knowledge of economic modelling. My coursework has been comprehensive, including Econometrics, Microeconometrics, and Macroeconometrics. In addition, as part of the Erasmus program at the University of Milan, I completed a Time Series Analysis course. This course introduced me to techniques for studying time series dynamics, AR, MA, ARMA and ARIMA models, and conditional variance models like ARCH and GARCH. I also learned to work with linear regression models using stationary and non-stationary time series, including cointegration, and explored recent methodologies for VARs and structural VARs.

I applied this knowledge in various projects, including my Bachelor's thesis on "Exchange Rate Pass-Through in Poland", where I analysed the influence of exchange rate shocks on prices using a 7-variable VAR model, and a project entitled "Analysis and Verification of the Relationship Defined as the Phillips Curve", leading to an internship at the Ministry of Finance in Poland, where I gained experience in macroeconomic modelling.

Being equally passionate about text analysis, I developed a Python application to detect whether a sentence is humorous or not. I also created a project for a Statistical Learning course where I analysed Yelp restaurant reviews. This project ultimately resulted in two applications, i.e., one recommending the 10 most (or least) similar restaurants based on user preferences, and another predicting binary ratings from review texts.

During my Master's program, I have attended a Machine Learning course, gaining foundational knowledge of neural networks. This has further fueled my interest in combining machine learning with economic modelling.

I am eager to explore how classical time series analysis can be enhanced with LLMs and textual data. I believe that integrating news and online content into time series analysis can provide significant predictive insights beyond historical data.

Thank you for considering my application.

Sincerely,
Julia Maria Wdowinska