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Morgan Stanley

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To whom it may concern,

Re: Quantitative Analyst-Financial Models(remote) ID: 3154877

In 2019, I completed a PhD in Economics at the University Paris Dauphine in Paris following the completion of a MSc in Economics at the University of Edinburgh. During my time completing my PHD I have taught courses economics and finance. At dauphine I taught general equilibrium (2nd year math students), Economics of uncertainty (3rd year math students), Microeconomics (1st year economic students), Money and Banking (2nd year economics students) and Political Social policy (2nd year economics students). As these courses were all taught in French, I believe this gives me the ideal qualification for the role, and has the added benefit of making me somebody with a very wide knowledge base as well a clear communicator.

My research is around the economics firm decision theory. Most relevant to the role of Quantitative Analyst is my breakthrough around discount rates, I have developed a clear method of evaluating and predicting future cash flows as a function of the kind of dynamics a firm is faced by. Specifically, when the firms in question grow multiplicatively, these firms should not be discounting with a smooth exponential function but with hyperbolic one. This helps resolve puzzles such as the equity premium paradox. As such, my research situates me in an ideal place for knowing when various financial tools are appropriate and what their limitations might be.

To complement my academic experience, I have attained numerous transferable skills through industry experience; most recently as an Economic Consultant at European Economics in Paris. The role had a heavy emphasis on evaluating the viability of projects using continental Weighted Average costs of capital (WACC) to calculate the net present value, internal rates of returns of projects as well compound annual growth rates of firm's revenues. I also learned how to clearly communicate the economic concepts I have learned throughout my PHD to industry experts to enable proper cross collaboration.

My background in finance does not end there, apart from my MSc in international finance, my dedication to personal development I have completed training London Mathematical Laboratory (Ergodicity Economics, leveraged efficiency); At the Real World Risk Institute (Modelling Options and Stochastic Processes, VaR, Kelly Criterion and expected shortfall with fat tails), Nassim Nicholas Taleb went through some detail about his trading strategies; and at the New England Complex Systems Institute (Random Graphs and Evolutionary Modelling using Python) . Specifically for forecasting, I have received training on forecasting time series fro, the University of Nicosia Makridakes Forecasting centre. This includes the standard methods of exponential smoothing, moving averages, auto regressive and the combination, the so called ARIMA. I have done a number of projects forecasting data on R, mostly retail data.

My recent academic achievements have been both challenging and rewarding, yet I still have a desire to face new challenges with greater responsibility that will allow me to demonstrate my full potential. In return I can offer dedication, integrity and a vast amount of personal experience and that will complement the role Quantitative Analyst. Should you be seeking a high-achieving PhD-qualified Economist with international experience, contact me at +336 95 66 98 09.

Yours faithfully, Mr Diomides Mavroyiannis