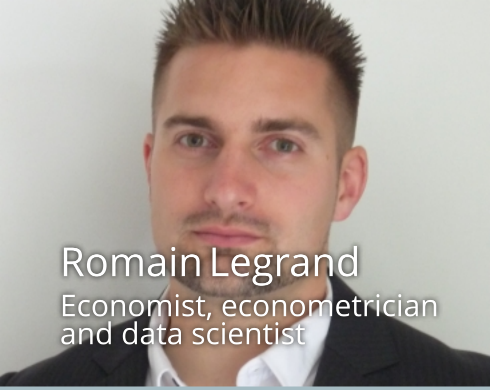

Romain Legrand

Economist, econometrician and data scientist

- 39 years old
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- 06 34 64 09 33
- www.linkedin.com/in/romain-legrand-quant

Languages

French: native

English: fluent

Personal interests

Martial arts

Swimming

Travelling

Profile

Accomplished economist, econometrician and data scientist with 10 years of experience in central banking and the finance industry.

Education

From 2019 to 2020

Post-Master's degree in Big data
Télécom ParisTech Paris

Master's degree in Big Data with courses in machine learning and deep learning, statistical models, sql/nosql and distributed systems.

From 2008 to 2014

PhD in Economics, with a specialization in econometrics and time-series methods
University of Cergy Pontoise - ESSEC Business School Cergy

- structural VAR modelling of the Euro Area with identification of structural breaks.
- DSGE modelling of the Euro area as an open economy characterised by financial frictions; identification of the welfare benefits of the Euro and the unconventional policies initiated by the ECB.

From 2007 to 2008

Research Master in Economics
University of Cergy-Pontoise / ESSEC Business School Cergy

From 2003 to 2007

Sciences Po
Institute of Political Studies Lyon

From 2001 to 2004

Bachelor in Foreign Languages, English and Chinese
University Jean Moulin Lyon 3 Lyon

Professional experience

Since May 2021

Quantitative researcher
Qube research and Technologies Paris, France

- use of macroeconometric models to generate global macro signals and design investment strategies; programming and backtesting of the models in Python.
- implementation of nowcasting models (dynamic factor models) to predict macroeconomic conditions on a daily basis.
- implementation of yield curve models (Nelson Siegel Svensson) to predict interest rate values and differentials across terms/countries.
- implementation of monetary strategies (carry, momentum, output gap...) to create global monetary portfolios.

From 2020 to April 2021

Quantitative researcher
Capital Fund Management Paris

- development of predictive models for the main macroeconomic aggregates; programming of the models in Python language.
- comparison of the predictive performances of three classes of models: econometrics (VAR, Bayesian VAR, time-varying Bayesian VAR), nowcasting (dynamic factor model, MIDAS regression, mixed frequency Bayesian VAR), and machine learning (LSTM, random forest and gradient boosting).

From 2014 to 2018

Econometrician and economist
European Central bank Frankfurt-am-Main, Germany

- Development of the Bayesian Estimation, Analysis and Regression (BEAR) Toolbox. BEAR is an advanced Bayesian time-series software for forecasting and economic/financial analysis. It is coded in Matlab and includes the latest, state-of-the art applications. More about BEAR (link to the ECB Working Paper:) https://www.ecb.europa.eu/pub/pdf/scpwps/ecbwp1934.en.pdf
- Drafting of policy notes and economic articles.
- Training of economists to Bayesian econometric methods. Organisation and participation of research seminars in econometrics. Writing of scientific articles.

Publications and Working papers

- Time-varying Vector Autoregressions: efficient estimations, random inertia and random mean*. MPRA working paper*, *August 2019.*
- The Bayesian Estimation, Analysis and Regression (BEAR) toolbox – with Alistair Dieppe and Björn Van Roye. *ECB Working Paper Series No. 1934, July 2016.*
- Euro introduction: has there been a structural change? Study on 10 - European Union countries. *Economic Modelling No. 40, June 2014.*
- L'effet dynamique des chocs d'offre et de demande agrégés. Une étude sur le cas allemand. (The dynamic effect of aggregate supply and aggregate demand shocks: study on the German case). *Revue Economique No. 63, January 2012.*

Technical skills

High proficiency:

- Python (Numpy, Pandas, Matplotlib, ScikitLearn, Keras, Tensorflow)
- Matlab (including Dynare)
- Eviews
- LaTeX

Intermediate proficiency:

- Sql-NoSql (PostgreSQL, Cassandra)
- distributed frameworks (Spark, Hadoop)
- Java programming