Divernois Marc-Aurèle

Rue du Midi 34, CH-1800 Vevey
27.02.1992, Swiss nationality
Email: divernois@gmail.com
Mobile: +41 79 756 47 53
Git: marcaureledivernois

Education

EPFL Lausanne, CH
Ph.D., Advisor: Damir Filipovic 2017–Current

- Area of research: "Machine Learning applied to Risk Management."

HEC Lausanne Lausanne, CH
M.S. in Finance, GPA: 5.60/6.00 2013–2015

- Thesis: "Estimation of a forward intensity model for corporate default prediction".

HEC Lausanne Lausanne, CH
B.S. in Economics, GPA: 5.30/6.00, ranked 6th in graduating class. 2010–2013

Experience

Lombard Odier Asset Management Geneva, CH
Risk Analyst 2015–2017

- Responsible for the daily monitoring of performance and risk of >200 Multi-Asset and Fixed Income portfolios and mandates. Analyzed the risk metrics and exposures for key portfolios to track any material changes in the portfolio positioning.

Lombard Odier Asset Management Geneva, CH
Analyst 2015

- Creation of a VBA platform in order to automate all the reporting of the fund (CHF 7.5 billion AuM).

Northlight Group London, UK
Intern Summer 2014

- Analyst for the investment team of a credit hedge fund, participating in various tasks such as high yield loan modeling, equity research and firm valuation.

Technical skills

- **Data Science/Machine Learning with Python**
  - **Supervised & Unsupervised:** Regressions, PCA, Clustering, Numpy, Pandas, Scikit-Learn, Statsmodels.
  - **Web Data Scraping:** Requests, BeautifulSoup, Selenium, JSON.
  - **Natural Language Processing :** Sentiment Analysis, NLTK, SpaCy, TFIDF, Word embeddings.
  - **Deep Learning :** Artificial Neural Networks, CNN, RNN, TensorFlow, Keras, PyTorch.
- **Programming Languages**
  - Python, Matlab, R, SQL, VBA, Stata, HTML, CSS, Git, Office, LaTeX.

Publications

[1] M.-A. Divernois and D. Filipovic, "StockTwits Classified Sentiment and Stock Returns", 2022.

[2] M.-A. Divernois, J. Etesami, D. Filipovic, and N. Kiyavash, "Firm Networks Using Granger Causality", submitted to Journal of Econometrics, 2021.

[3] M.-A. Divernois, "A Deep Learning Approach to Estimate Forward Default Intensities", in *Swiss Finance Institute Research Paper No. 20-79*, 2019.

Conferences talks

- **Applied Machine Learning Days** 2022
  Speaker of the track of Advances of Machine Learning Approaches for Financial Decision Making & Time Series Analysis.
- **SIAM Conference on Financial Mathematics and Engineering** 2021
  Presented my paper "StockTwits Classified Sentiment and Stock Returns".
- **SFI Research Days** 2020
  Presented my paper "A Deep Learning Approach to Estimate Forward Default Intensities".
- **Swissquote Conference on Artificial Intelligence in Finance** 2019
  Speaker at the EPFL Finance and Technology Program.

Teaching

- **Head Teaching Assistant** at EPFL 2017-2022
  Financial Big Data (M.Sc. class, Prof. D. Challet) ∼50 students.
  Advanced Derivatives (M.Sc. class, Prof. E. Perazzi) ∼40 students.
- **Teaching Assistant** at HEC 2011-2014
  Economics I : microeconomics (B.Sc. class, Prof. T. von Ungern) ∼900 students.
  Economics II : macroeconomics (B.Sc. class, Prof. C. Sfreddo) ∼600 students.
  Principles of Finance (B.Sc. class, Prof M. Rockinger) ∼300 students.

Awards

- **Best Teaching Assistant 2021** 2021
  Elected Best Teaching Assistant by the students of the Master in Financial Engineering at EPFL. Prize awarded during the graduation ceremony.
- **Winner of Saxo Bank's portfolio management simulation** 2014
  Highest portfolio value out of ∼750 participants at the end of a six weeks stock market game held by SaxoBank.
- **Winner of HEC Business Game** 2013
  Team ranked first out of 64 participants on a real-time business strategy simulation held by several professors using ERPSim.

Languages

- **French:** Mother tongue.
- **English:** Fluent.
- **German:** Intermediate B1.

Extracurricular Activities

- **Chess club Teacher** 2018
  Giving chess lessons to children up to 1500ELO.
- **Head of Junior Entreprise** 2014
  Student club offering consulting services to the market.