Antoine Baena

Research Economist in Financial Stability

Paris, France $\gg +33~(0)6~42~04~71~10$ \bowtie antoine.baena@outlook.com antoinebaena

Professional experience

June 2020 Bank of France, DG Financial Stability - Paris

- currently Improving the scalability and modularity of a banking stress test model by creating a Python package, integrating the project to GitLab and adding CI.

Feb. 2018 France Stratégie, think tank of the Prime Minister, Economics Division - Paris

- April 2020 Designing and implementing econometric models. Performing, publishing and presenting economic research.

- Baena, A., Gilles, C, Trannoy, A. (2020). Age and entrepreneurship performance, Research paper 2020-01
 France Stratégie. (Matching of balance sheet, buyout and liquidation databases)
- Estimation of the cost of a law proposal of the Ministry of Labor and construction of the financing plan and multi-tiered strategy for risk-taking.

2016 BETA, Public research laboratory in economics - Strasbourg

4 months Evaluation of social and economic impacts of an innovation policy (DiD and propensity score matching).

Education

Since 2021 Paris-Dauphine University, PhD in Economics

Thesis director: Sylvain Benoit and Serge Darolles

Dissertation topics: financial stability, macroprudential policy, derivatives market

2020 ENSAE Polytechnic Institute of Paris

Advanced master's degree in Quantitative methods for Economics and Finance

2018 **Strasbourg University,** Master's degree in Macroeconomics and European Policies Erasmus Exchange Program at Durham University (UK), MSc Economics Six-months Exchange Program at Montreal University (Canada), MSc Economics

2015 **Preparatory Class for the Ecole Normale Supérieure,** in Economics and Mathematics
Two-year intensive preparation for the highly competitive entrance exam of the Ecole Normale Supérieure

Others projects and activities

Best code award, Statup/CapGemini Invent 2019 machine learning hackathon, using the medical database Traumabase to predict pneumonia.

Appart-ai: Web application providing information on the housing marking based on machine learning algorithms. Back-end with Flask and Python, real-time webscraping, AWS server.

Organizer of conferences at the Association of master's degrees in economics of Strasbourg (AMES), "On marche sur la Dette" with Christophe Aleveque and Vincent Glenn in 2016.

Chess Professor in the club of Montpellier during four years. Graduated from the official French formation for chess teaching (DIFFE). Player in club for more than ten years, still now.

Skills

Programming Languages: Python (Scikit-learn, TensorFlow), R (Shiny), SQL, Javascript (D3.js).

Statistics and Machine Learning: Causal Inference (DiD, IV, RDD), Deep Learning, Predictive Modeling (Gradient Boosting), ML for Causal Inference (Causal Trees), Heckman model.

Languages: French, English (level C2, one year of study in United Kingdom), Spanish (B2).