

**EUROPEAN  
CURRICULUM VITAE  
FORMAT**



**PERSONAL INFORMATION**

Name

**ANDREA CONTI**

Location

Telephone

Fax

E-mail

Nationality

Italian

Date of birth

**WORK EXPERIENCE**

- Dates (from – to)
- Name and address

August 2022 – November 2023

Euroclear SA/NV, 1 Boulevard du Roi Albert II, 1210 Brussels, Belgium

- Position held

Model Validator

- Main activities

**- Validation activities**

- Market Risk Economic Capital  
Composed of two sub-models: Interest Rate and FX Risk model
- IRRBB (Interest Rate Risk in the Banking Book)  
The models subject to validation were the Regulatory Standardised Approach (IRRBB SA) and the Internal Approach (IRRBB IA) using the full revaluation principle.
- Credit Risk Economic Capital  
Oversight of the analysis and enhancement of the model concerning the Exposure at Default (EAD) and modelling via macro-stressed Probabilities of Default.  
Support on implementing analysis regarding the Basel-Vasicek approach.
- Sovereign PD Calibration model

**- Communication & processes:**

- Development of a company-wide model documentation template.
- Review of PRA guidelines for Model Risk Management.
- Reporting to internal stakeholders the status of open issues and action plans on all internally validated models.

• Dates (from – to)	October 2021 – April 2022 (6 months fixed term internship)
• Name and address	Euronext Clearing (CC&G), Via Tomacelli, Rome, Italy
• Position held	Market risk analyst
• Main activities	<ul style="list-style-type: none"> <li>- <b>Margin model - fixed income</b> (Fixed Income Risk Engine/ VaR Bond): <ul style="list-style-type: none"> <li>• Fixed income risk engine replica</li> <li>• Errors correction among test and production's environment</li> <li>• Tests</li> <li>• Clearing members' request management</li> </ul> </li> <li>- <b>Pricing:</b> <ul style="list-style-type: none"> <li>• Dividends estimation</li> <li>• Implementation of a model to estimate implied dividends for indexes in Python</li> <li>• Options' implied volatility adjustments to achieve best-fit</li> <li>• Update and computation of margin interval, and their respective margin model, among instruments listed on MTS, MTA, ETF Plus, IDEM, IDEX, AGREX</li> <li>• Closing price controls</li> </ul> </li> <li>- <b>Operations:</b> <ul style="list-style-type: none"> <li>• Intraday margin call analysis</li> <li>• Concentration, liquidity and initial margins monitoring</li> <li>• Stress test and default fund contribution analysis</li> <li>• Portfolio backtest</li> <li>• Reporting to the internal risk committee on various topics</li> <li>• Corporate actions</li> </ul> </li> </ul>

## EDUCATION AND TRAINING

• Dates (from – to)	2023 - now
• Name and type of organization providing education and training	Sapienza-Università di Roma, Faculty of Statistics.
• Title of qualification	PhD School of Economical and Social Sciences - Finance
• Areas of research	<ol style="list-style-type: none"> <li>1. Bayesian Statistics – Monte Carlo Markov Chain for parametric models</li> <li>2. Langevin Dynamics</li> <li>3. Machine Learning</li> <li>4. Causal Inference</li> </ol>
• Activity	Teaching Assistant for the module of Advanced Risk and Portfolio Management (ARPM).
• Teachings	Bayesian Statistics and Monte Carlo Markov Chain (MCMC); Hidden Markov (switching) Models (HMMs); Value at Risk Rearrangement Algorithm (VaR RA); Operational Risk and Panjer Recursion.

<ul style="list-style-type: none"> <li>• Dates (from – to)</li> <li>• Name and type of organization providing education and training</li> <li>• Title of qualification awarded</li> <li>• Grade</li> <li>• Principal subject covered</li> </ul>	<p><b>2020 - 2023</b> Sapienza-Università di Roma, Faculty of Statistics.</p> <p><b>QUANTITATIVE FINANCE – MASTER DEGREE</b></p> <p>-Final Grade: summa cum laude &amp; praise -Thesis: Probability of Default models for credit scoring: Bayesian Artificial Neural Network with Langevin Dynamics -Projects: Hyperbolic GARCH model implementation from scratch in R. -Seminars held: 1. PD models, credit scoring, Basel-Vasicek approach for PD, Neural Networks for PD, 2. Proofs on Neural Network and their derivation, Backpropagation and RNN-LSTM.</p> <p>Financial risk management, Algorithms and data structure, Montecarlo Methods &amp; Asset pricing, R, Python, SQL, ARPM course (Advanced risk and portfolio management), panel data models for the banking sector, numerical methods for SDEs, Martingales and financial mathematics, multivariate statistics.</p>
	<p><b>2017 - 2020</b> Sapienza-Università di Roma, Faculty of Economics.</p> <p><b>BANK, INSURANCES AND FINANCIAL MARKETS – BACHELOR DEGREE</b> - Final grade: Summa cum laude</p> <p>- Thesis: Pricing insurance policies with flexible benefits. - Projects: Assets/liabilities management, IRS &amp; derivatives, monetary policy models, financial markets and private insurances law, portfolio construction, Markowitz's theories.</p>
	<p><b>2012 – 2017</b> Diploma, Scientific High School Plinio Seniore. Voto: 95 / 100</p>
<b>TECHNICAL SKILLS AND COMPETENCES</b>	<p>Proficient: Fortran, R, Python, SQL, MS Office package, Gretl. Basic: MATLAB, C</p>
MOTHER TONGUE	<b>ITALIAN</b>
OTHER LANGUAGES	
<ul style="list-style-type: none"> <li>• Reading skills</li> <li>• Writing skills</li> <li>• Verbal skills</li> </ul>	<p><b>ENGLISH</b> c1 c1 c1</p>
<b>SOCIAL/ORGANIZATIONAL SKILLS AND COMPETENCES</b>	<p>LONG-LIFE LEARNER, RESULT DRIVEN, ABLE TO WORK BOTH INDIVIDUALLY AND IN GROUP, GOOD COMMUNICATION SKILLS, PRECISE AND RELIABLE.</p>
DRIVING LICENSE	<b>B</b>

