

# ROCCO CLAUDIO CANNIZZARO

## SUMMARY

Versatile, motivated, and results-driven risk management professional with a passion for financial engineering. Expert in the design and architecture of enterprise risk management software solutions. Combining an engineering background with soft skills, over the past 13 years at SAS, I've established strong relationships across the organization:

- Working with Talent Acquisition, HR, Education and SAS Academy to recruit, train and develop young talents.
- Supporting Pre-Sales and Consulting teams with RFPs, demos, project estimation/scoping, architecture review and technical challenges.
- Partnering with Sales and becoming a trusted advisor for key customers.

## CORE QUALIFICATIONS

- ◆ Proven leadership experience, hiring and managing high performing teams.
- ◆ Ability to negotiate and influence decisions.
- ◆ Experienced with highly regulated environments, working under time pressure and with resource constraints.
- ◆ Broad knowledge of Applied Statistics, Estimation Theory, Econometrics, and Risk Modeling techniques.
- ◆ Strong technical background, software architectures, data processing, analytics, and reporting technologies.
- ◆ Programming languages: SAS, SAS Macro, Java, Matlab, R, Python, Lua, SQL
- ◆ Web: Php, JavaScript, XML, HTML, CSS, REST API
- ◆ Software development life cycle: Jira, Gitlab, CI/CD automation, Agile/Scrum methodology

## PROFESSIONAL EXPERIENCE

### OPTIONTRADERS, USA

Mar 2022 – CURRENT

#### Co-Founder, Head of Analytics

##### *Main activities and responsibilities:*

- Quantitative Research:
  - Volatility Models
  - Statistical Arbitrage Techniques
  - Strategy design and backtesting
  - Option Analysis Software Development
- Proprietary Trading:
  - Traded Assets: Equities, Bonds and Indexes
  - Account size: \$250k+
- Creation and delivery of financial education courses:
  - Options Markets
  - Quantitative methods for trading
  - Option Strategies and Portfolio Management
  - Risk Management

### SAS INSTITUTE, USA

JAN 2017 – CURRENT

#### Multiple roles, leading up to **Senior Director, Head of Risk R&D**

##### *Main activities and responsibilities:*

- Research & Development:
  - Development of SAS next generation Enterprise Risk Management platform
  - High performance computing architecture
  - Launch of new solutions for the Banking (CECL, IFRS9, Stress Testing, ALM) and Insurance (IFRS17, LDTI) industries
- Member of the SAS Risk leadership team:
  - Business planning and market expansion strategy
  - Review and approval of investment decisions
- Talent Acquisition and Management:
  - Recruitment and growth of the R&D development teams
  - Performance management, mentoring and career planning
- Customer facing activities:
  - Deliver training on SAS Risk Management solutions and technologies
  - Support pre-sales and project implementations
  - Customer escalation management

**Results:**

- SAS Risk Solutions awarded (multiple years) [winner of the Chartis Risk Teck 100](#) for IFRS9, Model Risk Management, Risk & Finance Integration, Balance Sheet Management and Enterprise Stress Testing.
- Involved in the Kamakura acquisition (business case, technology assessment, integration plans): the acquired technology was integrated with SAS ALM Solution within 4 months from closing, ahead of schedule.
- Reduced budget spending through internal reorg and establishing SME centres for Risk development in lower cost geographies.
- U.S. Patent No. 11,016,871 issued in relation to the design of a highly efficient algorithm for the execution of bootstrapping processes.
- U.S. Patent pending (SAS-100322 Notice of Allowance) in relation to the design of a hierarchical risk disaggregation system.
- SAS CEO Award Winner (2019)

**SAS INSTITUTE, Switzerland**

OCT 2011 – DEC 2016

Multiple roles, leading up to **Director, Insurance Risk Management****Main activities and responsibilities:**

- Product Management:
  - Managed SAS insurance risk products portfolio
  - Drove the development of SAS next generation Insurance Risk Management platform
- Global Consulting:
  - Provided global support on Risk Management solutions to local SAS offices around the world
  - RFI/RFP responses, demos, project plans, effort estimation and pricing
- Business Development:
  - Market analysis and customer segmentation
  - Built prototypes for new solutions and created collaterals and demo scripts to support the sales team
  - Worked with SAS partners and System Integrators for joint go-to-market activities

**Results:**

- Timely delivery of the new SAS Insurance Risk Management platform and each subsequent release
- Launched three new solutions for the insurance market, addressing the Solvency II regulatory requirements
- Successfully supported 20 different projects, especially ensuring customer retention on occasions where the customers were considering alternatives with the competitors.
- Developed a data loader that enables quicker delivery of *SAS Risk Management for Insurance* projects, reducing to almost 50% the implementation effort. This tool has been successfully deployed on the majority of insurance clients across Europe.

**[R-ADAMANT](#)**, Open-source project - Financial Analysis and Risk Management    MAR 2010 – NOV 2011**Co-Founder****Main activities and responsibilities:**

- Quantitative Modelling, Development and Testing:
  - Econometrics, Risk Evaluation and Portfolio Optimization.
  - Technical Analysis and Spectral Analysis.

**Results:**

- Project presented at the annual *R User Conference* ([UseR2010](#)), hosted by the National Institute of Standards and Technology (NIST), Maryland, USA, July 2010.
- [Tutorial](#) delivered at the annual *R User Conference* ([UseR2011](#)), hosted by the University of Warwick, UK, August 2011.

**ULSTER BANK (RBS GROUP), Ireland**

JUN 2010 – OCT 2011

**Quantitative Analyst, Wholesale Credit Models, Strategic Credit Analysis****Main activities and responsibilities:**

- Stress Testing and Monte-Carlo based scenario forecasting:
- PD Models Calibration and Validation
- Management Reporting and Regulatory Compliance:

**Results:**

- Created a framework for the end-to-end development of Stress Testing models.
- Set up the infrastructure for data analysis and reporting

**DISTINCT BUSINESS CONSULTING (now FTI CONSULTING), Ireland**

OCT 2008 – JUN 2010

**Senior Business Consultant****Main activities and responsibilities:**

- Design end-to-end Business Intelligence solutions:
  - Data Quality, ETL design and development using SAS Insurance industry solution.
  - Enterprise BI: Data Warehouse, OLAP, Reporting, KPI and dashboards.
  - Data Mining and Analytics.

**Results:**

- On time delivery of large-scale/multi-phased Enterprise Business Intelligence project for a major international insurance company.
- End-to-end design, implementation and leading the development of a new BI dashboard and reporting platform based on open-source software.

**SAS INSTITUTE, Italy**

JUL 2006 – OCT 2008

**Senior Consultant****Main activities and responsibilities:**

- Development and delivery of IT Solutions based on SAS9 Business Intelligence architecture:
  - Data analysis and requirements gathering.
  - Data Warehouse, OLAP, ETL, Reporting and Web Applications.
  - Balanced Scorecards design for Performance Management.

**Results:**

- Successfully delivered multiple BI and Performance Management projects in two years across various industries (mostly Banks, Telecommunications, Energy and Public Administrations).
- Became SAS Italy's point of reference for the implementation of SAS *Strategy Management* solution, providing technical support, defining best practices, and delivering training.

**UNIVERSITY OF PERUGIA, Italy**

SEP 2005 – SEP 2006

**Research Activity, Electronics and Information Engineering Department (DIEI)****Main activities and responsibilities:**

- Analysis and simulation of advanced techniques for efficient estimation and tracking of time-varying channels with applications to Formula 1 (Telemetry) and Digital Video Broadcasting (DVB).

**Results:**

- Design and implementation of multiple adaptive algorithms for wireless channel estimation in OFDM systems, in high mobility and time variant scenarios.
- Results have been submitted and published to *IEEE* international conferences and reviews.

## EDUCATION

**2005: Master's degree** in *Computer Science and Telecommunications Engineering*, University of Perugia (Italy), 110/110 Magna Cum Laude.

**2003: Bachelor's Degree** in *Information and Technology Engineering*, University of Perugia (Italy), 110/110 Magna Cum Laude.

**2005: April - July**

**Socrates/Erasmus** student exchange program, [Delft University of Technology](#) (The Netherlands).

Research activities under the supervision of the [Electrical Engineering, Mathematics and Computer Science Department](#).

## PUBLICATIONS

### *International reviews*

- Z. Tang, R. C. Cannizzaro, G. Leus, P. Banelli, "[Pilot-Assisted Time-Varying Channel Estimation for OFDM Systems](#)", *IEEE Transactions on Signal Processing*, November 2005.

### *International conferences*

- P. Banelli, R. C. Cannizzaro, L. Rugini, "[Data-aided Kalman Tracking for channel estimation in Doppler-affected OFDM systems](#)", *IEEE International Conference on Acoustic Speech and Signal Processing*, ICASSP 2007, Honolulu, Hawaii, USA, April 2007.
- R. C. Cannizzaro, P. Banelli, G. Leus, "[Adaptive Channel Estimation for OFDM Systems with Doppler spreads](#)", *IEEE Symposium on Signal Processing Advances for Wireless Communications*, SPAWC 2006, Cannes, France, July 2006.
- Z. Tang, G. Leus, R. C. Cannizzaro, P. Banelli, "[Pilot-Assisted Time-Varying OFDM Channel Estimation](#)", *IEEE International Conference on Acoustic Speech and Signal Processing*, ICASSP 2006, Toulouse, France, May 2006.
- L. Rugini, P. Banelli, R. C. Cannizzaro, G. Leus, "[Channel Estimation and Windowed DFE for OFDM with Doppler spread](#)", *IEEE International Conference on Acoustic Speech and Signal Processing*, ICASSP 2006, Toulouse, France, May 2006.