Sebastiano Vitali

Curriculum Vitae

Work Experience

Current – Sep 2020 **Assistant Professor, RTD-A**, University of Bergamo, Bergamo.
Department of Economics.

Sep 2020 – Oct 2018 **Assistant Professor, RTD-A**, University of Bergamo, Bergamo.
Department of Management, Economics and Quantitative Methods.

Jul 2019 – Aug 2019 **Visiting Scholar**, Universidad de Castilla-La Mancha, Toledo.
School of Industrial Engineering

Sep 2018 – Oct 2016 **Assistant Professor with Tenure Track**, Charles University, Prague.
Faculty of Mathematics and Physics, Department of Probability and Mathematical Statistics.

Sep 2018 – Nov 2016 **Adjunct Professor**, University of Modena and Reggio Emilia, Modena.
Department of Economics

Sep 2018 – Nov 2017 **Adjunct Professor**, University of Bergamo, Bergamo.
Department of Management, Economics and Quantitative Methods.

Jul 2018 – Aug 2018 **Visiting Scholar**, Universidad de Castilla-La Mancha, Toledo.
School of Industrial Engineering

Nov 2016 – Dec 2015 **Postdoctoral Fellow**, University of Bergamo, Bergamo.
Research Project: "ITALY®(Italian TALented Young ®esearcher)"
SSD SECS-S/06 - Department of Management, Economics and Quantitative Methods
Research program: Optimal Pension Plans for Pension Fund.

Feb 2016 – Sep 2014 **Assistant lecturer**, University of Brescia "Cattolica del Sacro Cuore", Brescia.

Jul 2016 – Sep 2008 **Assistant lecturer**, University of Bergamo, Bergamo.
Tutoring in the university courses of Financial Mathematics, Mathematics, Advanced Calculus, Statistics, Advanced Mathematical Methods for Economics and Finance, Computer Science.

May 2012 – Feb 2012 **Private Banker**, Banca Fideuram, Bergamo.
Advisor and Management of retail portfolios

Jun 2012 – Jun 2011 – Oct 2010 **Tutor in the project "Learning Week – Training the mind for economics"**, Ikaros Formazione, Bergamo.
Tutoring activity for high school students

Qualification

Oct 2024 – Oct 2018 **Abilitazione Scientifica Nazionale**, *Abilitazione per Professore di II Fascia nel settore concorsuale 13/D4*, ASN 2016-2018, Quinto Quadrimestre.

Teaching

AY 2019-21 **Models and Methods for Economics and Finance**, University of Bergamo, Assistant Professor, RTD-A.

AY 2018-21 **Computer Science**, University of Bergamo, Assistant Professor, RTD-A.

AY 2019-20 **Risk Management and Derivatives**, University of Bergamo, Assistant Professor, RTD-A.

AY 2018-19 **Financial Mathematics**, University of Bergamo, Assistant Professor, RTD-A.

AY 2016-19 **Computational Aspects of Optimization**, Charles University, Assistant Professor with Tenure Track.

AY 2016-19 **Economics**, Charles University, Assistant Professor with Tenure Track.

AY 2016-19 **Probability and Statistics**, Charles University, Assistant Professor with Tenure Track.

AY 2016-19 **Investment Analysis**, Charles University, Assistant Professor with Tenure Track.

AY 2016-19 **Credit Risk in Banking**, Charles University, Assistant Professor with Tenure Track.

AY 2016-2018 **Advanced Risk Management**, University of Modena and Reggio Emilia, Adjunct Professor.

AY 2017-18 **Financial Mathematics**, University of Bergamo, Adjunct Professor.

AY 2016-17 **Operational Research**, University of Brescia "Cattolica del Sacro Cuore", Assistant Lecturer.

AY 2008-16 **Operational Research**, University of Brescia "Cattolica del Sacro Cuore", Assistant Lecturer.

Grant Research Participation

Current
Jan 2018 **Research Project Participant**, Charles University, Prague.
Czech Science Foundation, GACR 19-28231X.

Current
Jan 2017 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Stochastic dominance applied to Asset-Liability Management dynamics"

Sep 2018
Jan 2018 **Research Project Participant**, Charles University, Prague.
Czech Science Foundation, GACR 18-01781Y: "Dynamic and granular loss reserving with copulae".

Sep 2018
Jan 2015 **Research Project Participant**, Charles University, Prague.
Czech Science Foundation, GACR 402/12/G097: "DYME/Dynamic Models in Economics".

Jan 2012
Dec 2014 **Research Project Participant**, Charles University, Prague.
Czech Science Foundation, P402/12/0558: "Efficiency and risk control in decision making".

Jan 2015
Dec 2017 **Research Project Participant**, Charles University, Prague.
Czech Science Foundation, 15-02938S: "Stochastic dominance in operations research".

Current
Sep 2017 **Research Project Participant**, VSB-TUO, Ostrava.
Czech Science Foundation, GACR 17-19981S.

Current
Jan 2017 **Research Project Participant**, VSB-TUO, Ostrava.
Czech Science Foundation, GACR: "Financial applications of stochastic ordering rules"

Jan 2013
Dec 2015 **Research Project Participant**, Institute of Information Theory and Automation, Prague.
Czech Academy of Sciences, 13-25911S: "Arbitrage-free modelling of implied volatility in options".

Current
Agu 2017 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Monitoring Student's Mobility Abroad. L'esperienza degli studenti dell'Ateneo di Bergamo in mobilità internazionale".

Jan 2015
Dec 2016 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Asset Portfolio Model for Pension Funds"

Jan 2016
Dec 2017 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Approfondimenti e indagini sulle curve matematiche: lo studio e le applicazioni dal secoli passati a oggi"

Jan 2016
Dec 2017 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Approfondimenti e indagini sulle curve matematiche: lo studio e le applicazioni dal secoli passati a oggi"

Dec 2015
Mar 2016 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Portfoglio replication and MonteCarlo simulation comparison in Pension Fund liability pricing and evaluation"

Oct 2015
Feb 2016 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Monitoring Student's Mobility Abroad. L'esperienza degli studenti dell'Ateneo di Bergamo in mobilità internazionale".

Nov 2009
Dec 2009 **Research Project Participant**, University of Bergamo, Bergamo.
University Funds: "Disequazioni variazionali ed applicazioni al mercato elettrico".

Seminar activity

Oct 2019 **Seminar "Pension Fund ALM with Multistage Stochastic Dominance"**, Charles University, Prague, Seminars on Econometrics and Stochastic Optimization.

Oct 2018 **Seminar "Asset and Liability Management, tailored solutions for pension funds"**, University of Modena and Reggio Emilia, Modena, CEFIN Seminars.

Oct 2018 **Seminar "Applications of Multistage Multivariate Nested Distance"**, Charles University, Prague, Seminars on Econometrics and Stochastic Optimization.

Nov 2017 **Seminar "Multistage Multivariate Nested Distance"**, Charles University, Prague, Seminars on Econometrics and Stochastic Optimization.

Nov 2017 **Seminar "Multi-stage Stochastic Programming"**, Ernst&Young, Prague.

Feb 2017 **Seminar "How to choose where to invest in a Pension Fund"**, University of Modena and Reggio Emilia, Modena, CEFIN Seminars.

Feb 2017 **Seminar "Programming with R - Application in Finance"**, University of Bergamo, Bergamo, Ph.D. program on Analytics for Economics and Business.

Aug 2016 **Seminar "Stress-testing of pension fund ALM models with stochastic dominance constraints"**, Georgia Tech University, Atlanta.

Apr 2016 **Seminar "Stochastic Programming applied to ALM for Pension Fund"**, Charles University of Prague, Prague.

May 2015 **Seminar "Statistics in Excel - Inference and Linear Regression"**, University of Bergamo, Bergamo.

Nov 2015 **Seminar "Aritificial Neural Network - Theory and Applications"**, University of Bergamo, Bergamo.

Education

Oct 2012 – Dec 2015 **Ph.D. in Economics, Applied Mathematics and Operational Research**, *University of Bergamo*, Supervisor: Prof. Moriggia, External Supervisor: Prof. J. Dupačová, Evaluation: Excellent.

Stochastic Programming Modeling - Asset and Liability Management - Pension Fund Management - Portfolio Theory - Portfolio management - MATLAB and GAMS - Quantitative Finance

Sep 2013 – Jul 2014 **Ph.D. Visiting Student**, *Charles University in Prague*, Supervisors: Prof. J. Dupačová and Prof. M. Kopa.

Multistage Stochastic Programming - Asset and Liability Management - Option Pricing - State Price Density - Semiparametric Kernel Estimation

Sep 2011 – Feb 2012 **Post Master degree in Private Banking**, *University "Cattolica del Sacro Cuore" – Business School "Il Sole 24 Ore"*, Milan.

Market Analysis - Economics - Portfolio Management - Asset Allocation - MATLAB

Sep 2009 – Nov 2011 **MSc in Management, Finance and International Business (quantitative course)**, *University of Bergamo*, Evaluation: 110/110 cum laude.

Ph.D. Thesis

Title *Pension Fund Management in a Stochastic Optimization Framework*

Supervisor Professor V. Moriggia

Ext.Supervisor Professor J. Dupačová

Masters Thesis

Title *Strategic asset allocation under liquidity and risk capital constraints*

Supervisor Professor G. Consigli

Bachelor Thesis

Title *One-period risk measurement: how to protect from variations of the energy prices*

Supervisor Professor M. Bertocchi

Computer skills

Advanced MATLAB, GAMS, Excel VBA, Microsoft Office

Intermediate LaTeX, Scientific WorkPlace, R

Languages

Italian **Mothertongue**
English **Fluent**
Spanish **Good**
French **Basic**
Czech **Basic**

Reviewer Activity

Communications in Nonlinear Science and Numerical Simulation.
Computational Management Science.
Economic Modelling.
Kybernetika.
Mathematical Problems in Engineering.
Quantitative Finance.
Risks.

Organization of Conferences and Schools

Jun 2017 **Workshop: Stochastic Optimisation and Data Analytics for Computational Management**, Bergamo.
Jun 2017 **Computational Management Science: Pricing, Risk and Optimization in Management Science**, Bergamo.
Jen 2017 **PhD Winter School, Stochastic programming with applications in energy, logistics and finance**, Passo del Tonale.
Jul 2013 **International Conference on Stochastic Programming** , Bergamo.

Participation of Conferences and Schools

Aug 2020 **Statistics of Machine Learning 2020**, Prague.
Dec 2019 **Computational and Methodological Statistics 2019**, London.
Nov 2019 **FIDNES 2019**, Curaçao.
Jun 2019 **European Conference on Operational Research**, Dublin.
Mar 2019 **Computational Management Science**, Chemnitz.
Sep 2018 **AMASES 2018**, Napoli.
Sep 2018 **AIRO 2018**, Taormina.
Jul 2018 **European Conference on Operational Research**, Valencia.
May 2018 **Computational Management Science**, Trondheim.
May 2018 **Euro Working Group for Commodities and Financial Modelling**, Kaunas.
Feb 2018 **Stochastic Optimisation and Data Analytics for Computational Management**, Bergamo.
Sep 2017 **European Conference on Stochastic Optimization**, Rome.

Sep 2017 **AMASES 2017**, Cagliari.

Sep 2017 **Financial Management of Firms and Financial Institutions**, Ostrava.

Sep 2017 **International Conference on Mathematical Methods in Economy and Industry**, Jindrichuv Hradec.

Jul 2017 **International Federation of Operational Research Societies**, Quebec.

Jun 2017 **Quantitative Finance and Risk Analysis**, Corfu.

May 2017 **Computational Management Science**, Bergamo.

Jan 2017 **Winter Ph.D. School "Stochastic programming with applications in energy, logistics and finance"**, Passo del Tonale.

Dec 2016 **VOCAL Optimization Conference: Advanced Algorithms**, Esztergom.

Aug 2016 **COMPMAPP Computational Management and Applications**, Atlanta.

Jul 2016 **European Conference on Operational Research**, Poznan.

Jun 2016 **Applied Mathematical Programming and Modelling**, Brno.

May 2016 **Computational Management Science**, Salamanca.

Nov 2015 **Dependence and Risk Measures Workshop**, Milan.

Sep 2015 **AIRO 2015**, Pisa.

Sep 2015 **International Conference on Operational Research**, Wien.

Jul 2015 **European Conference on Operational Research**, Glasgow.

Jun 2015 **DEA**, Ostrava.

May 2015 **Computational Management Science**, Prague.

Jen 2015 **AIRO Winter 2015**, Champouluc.

Dec 2014 **VOCAL Optimization Conference: Advanced Algorithms**, Vesprém.

Dec 2014 **Euro Working Group for Commodities and Financial Modelling**, Milan.

Sep 2014 **European Conference on Stochastic Programming and Energy Applications**, Paris.

Jun 2014 **Optimization Workshop**, King's Collage, London.

May 2014 **Euro Working Group for Commodities and Financial Modelling**, Chania.

Apr 2014 **Ph.D. School "Scenario Optimization"**, Supelec, Paris.

March 2014 **Winter Ph.D. School "Stochastic programming with applications in energy, finance and insurance"**, Bad Hofgastein.

Dec 2013 **Euro Working Group for Commodities and Financial Modelling**, Wien.

Jul 2013 **International Conference Stochastic Programming**, Bergamo.

Apr 2013 **Winter Ph.D. School "Stochastic programming with applications in energy and natural resources"**, Tignes.