Curriculum Vitae

INFORMAZIONI PERSONALI

Nome　　MARTINA

Cognome　VITTORIETTI

Recapiti　Dipartimento di Scienze Economiche, Aziendali e Statistiche Università degli Studi di Palermo Viale delle Scienze, Edificio 13

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FORMAZIONE TITOLI

Jun 2021 - Fixed-term assistant professor (RTD-A), Department of Economics, Business and Statistics, University of Palermo, Italy. Research field: Social Statistics

Jun 2020 – Jun 2021 Postdoctoral researcher, Department of Applied Mathematics, Delft University of Technology, The Netherlands. Project Title: "DENS", Digitally Enhanced New Steel Product Development

Jun 2016 –Jul 2020 Ph.D Candidate, Department of Applied Mathematics, Delft University of Technology, The Netherlands. Thesis Title: Statistical analysis of the relation between metallic microstructures and mechanical properties

Oct 2013 – Mar 2016 Master's Degree, Statistical Sciences, University of Palermo, Italy. Master Thesis: A longitudinal analysis of the occupational status of the graduates of the University of Palermo Grade: 110/110 cum laude.

ATTIVITA' DIDATTICA

Academic Year 2019-2020

Sep 2019 – Nov 2019 Calculus and Differential Equations (tutorials, 32h, in English). Bachelor's Degree in Technology, Policy and Management, Delft University of Technology

Academic Year 2018-2019

Feb 2019 – Apr 2019 Statistics for Architecture (tutorials, 10h, in English and Dutch). Bachelor's Degree in Architecture, Delft University of Technology
Nov 2018 – Jan 2019 Linear Algebra and Differential Equations (tutorials, 32h, in English). Bachelor's Degree in Technology, Policy and Management, Delft University of Technology
Sep 2018 – Nov 2018 Calculus and Differential Equations (tutorials, 32h, in English). Bachelor's Degree in Technology, Policy and Management, Delft University of Technology

Academic Year 2017-2018

Feb 2018 – Apr 2018 Statistics for Architecture (tutorials, 10h, in English and Dutch). Bachelor's Degree in Architecture, Delft University of Technology
Nov 2017 – Jan 2018 Linear Algebra and Differential Equations (tutorials, 32h, in English). Bachelor's Degree in Technology, Policy and Management, Delft University of Technology
Sep 2017 – Nov 2017 Calculus and Differential Equations (tutorials, 32h, in English). Bachelor's Degree in Technology, Policy and Management, Delft University of Technology

RICERCHE FINANZIATE

October 2018 Travel Grant, MSRI, Berkeley, California. Description: Workshop Hot Topics: Shape and Structure of Materials

June 2018 Travel Grant, CIRM, Levico Terme, Italy. Description: Summer School "Topological Data Analysis and Persistent Homology

May 2017 Travel Grant, CIRM, Marseille, France. Description: 19th workshop on Stochastic Geometry, Stereology and Image Analysis (SGSIA)

April 2017 Travel Grant, CRoNoS COST, Larnaca, Cyprus. Description: CRoNoS Spring Course on Multivariate methods with R

Nov. 2015 -May 2016 Postgraduate Grant, University of Palermo, Italy. Description: Student grant for analysis and support to orientation service

of
the University of Palermo

PUBBLICAZIONE

Vittorietti, M. (2021) Metallic Statistics: How modern blacksmiths use mathematics to produce new materials, The Network Pages (https://www.networkpages.nl/metallic-statistics-how-modern-blacksmiths-use-mathematics-to-produce-new-materials/)

Vittorietti, M., Hidalgo, J., Sietsma, J., Li, W., & Jongbloed, G. (2020). Isotonic regression for metallic microstructure data: estimation and testing under order restrictions. Journal of Applied Statistics, DOI: 10.1080/02664763.2021.1896685.

Hidalgo, J., Vittorietti, M., Farahani, H., Vercruysse F. , Petrova R. & Sietsma, J. (2020). Influence of large M23C6 carbides on the heterogeneous strain development in annealed 420 stainless steel. Acta Materialia, 200, 74-90.

Vittorietti, M. (2020). Statistical analysis of the relation between metallic microstructures and mechanical properties. PhD thesis, Delft University of Technology (https://repository.tudelft.nl/islandora/object/uuid:6d5208ff-9f95-4a93-9ccf-d85ee0145cd4)

Li, W., Vittorietti, M., Jongbloed, G., & Sietsma, J. (2020). The combined influence of grain size distribution and dislocation density on hardness of interstitial free steel. Journal of Materials Science & Technology, 45, 35-43.

Vittorietti, M., Kok, P. J., Sietsma, J., Li, W., & Jongbloed, G. (2020). General framework for testing Poisson-Voronoi assumption for real microstructures. Appl Stochastic Models Bus Ind, 1-24.

Vittorietti, M., Giambalvo, O., Aiello, F. (2019). A mobility analysis of the occupational status of the graduates of the University of Palermo in an economic crisis context. Electronic Journal of Applied Statistical Analysis, 12(4), 846-869

Vittorietti, M., Kok, P. J., Sietsma, J., & Jongbloed, G. (2019). Accurate representation of the distributions of the 3D Poisson-Voronoi typical cell geometrical features. Computational Materials Science, 166, 111-118.

ATTIVITA' SCIENTIFICHE

Presentations

09-12 June 2021 Talk, The different attitude to mobility of the Italian students: a new methodological approach to investigate the inequalities, SISEC 2021, Catania, Italy.

26 April 2021 Invited Seminar Talk, General framework for testing Poisson-Voronoi diagrams assumption for diverse microstructural data, Department of Applied Mathematics, Delft University of Technology, The Netherlands.

13 May 2020 PhD seminar, Isotonic regression for metallic microstructure data: estimation and testing under order restrictions, Department of Applied Mathematics, Delft University of Technology, The Netherlands.

09–10 Dec 2019 Presentation, General testing framework for microstructure modeling: the Poisson-Voronoi case, M2i Conference & Meeting Materials 2019, Noordwijkerhout, The Netherlands.

09–10 Dec 2019 Poster, MICtoMEC: a statistical analysis from microstructure features to mechanical properties –Towards new materials, M2i Conference &
Meeting Materials 2019, Noordwijkerhout, The Netherlands.

11–13 Nov 2019 Poster, MICtoMEC: a statistical analysis of microstructure features, Stochastics Meeting Lunteren 2019, Lunteren, The Netherlands.

15 Oct 2019 Invited Seminar Talk, General framework for testing Poisson-Voronoi assumption for real microstructures, EPFL Applied Topology Seminar 2019/20, Lausanne, Switzerland.

20–22 Sep 2019 Talk, A topological data analysis approach to high-school and first level university student interregional mobility., Social statisticians meeting-
Statistical festival, Treviso, Italy.

22–26 Jul 2019 Talk, 2D real microstructures images: a great source of data, 32nd European Meeting of Statisticians, Palermo, Italy.

12 Mar 2019 Invited Seminar Talk, Extensive quantification of microstructures features and statistical relations with mechanical behavior – from statistical
relations to physical understanding, Department of Economics, Business and Statistics, University of Palermo, Italy.

31 Jan–2 Feb 2019 Talk, A topological data analysis approach to high-school and first level university student interregional mobility, SISEC 2019, Naples, Italy.

10–11 Dec 2018 Poster, Persistence Diagram: a new microstructure descriptor, M2i Conference & Meeting Materials 2018, Noordwijkerhout, The Netherlands.

11–12 Dec 2017 Poster, The distributions of the 3D Poisson-Voronoi typical cell geometrical features, M2i Conference & Meeting Materials 2017, Noordwijkerhout,
The Netherlands.

15–19 May 2017 Poster, MICtoMEC: from MICrostructures to MEChanical properties, 19th Workshop on Stochastic Geometry, Stereology and Image Analysis
(SGSIA), CIRM, Marseille, France.

30 Mar 2017 PhD seminar, Accurate approximation of the distributions of the 3D Poisson-Voronoi typical cell geometrical features depending on intensity
parameter, Department of Applied Mathematics, Delft University of Technology, The Netherlands.

8–10 Feb 2017 Talk, A longitudinal analysis of the occupational status of the graduates of the University of Palermo, Population Days 2017, Florence, Italy.

12-13 Dec 2016 Poster, On the Grain Size Distribution, M2i Conference & Meeting Materials 2016, Nieuwegein, The Netherlands.

AMBITI DI RICERCA

Applied Statistics, Social Statistics, Statistics for Materials Science, Topological Data Analysis