

# Vassilios Canellidis

## Contact Information

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## Education

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| 2011 | Ph.D., Optimization Methods for Advanced Manufacturing Systems, Department of Industrial Management and Technology, University of Piraeus. |
| 2006 | M.Sc. in Techno-Economic Systems, School of Electrical and Computer Engineering, National Technical University of Athens.                  |
| 2002 | Bachelor in Industrial Management and Technology, Department of Industrial Management and Technology, University of Piraeus.               |

## Professional/Research Experience

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|-------------------|---|
| 6/2016-2/2024     | Independent Authority for Public Revenue (IAPR), Tax and Customs Academy.   |
| 7/2022-09-20222   | Researcher, Project: Implementation of scientific research on new methodologies and statistical processing of data resulting from the application of Regulation (EC) No 1371/2007 on the rights and obligations of railway passengers for the years 2020-2021, for the needs of the Railway Regulatory Authority. |
| 2020-2021         | University Scholarship: Program 'Acquisition of Academic Teaching Experience for New PhD Holders 2020-2021 at the University of Piraeus.  |
| 1/2015-09/2015    | "Kallipos" Repository - Development of e-books, Hellenic Academic Electronic (Text)books Programme, Hellenic Ministry of Education.   |
| 08/2014-06/2015   | Redesign and Recycling of Photovoltaic Panels, SYNERGASIA Programme, funded by General Secretariat for Research and Technology, Hellenic Ministry of Education.   |
| 04/2014-09/2014   | 3D Structures for Tissue Engineering, THALIS Programme, funded by the Hellenic Ministry of Education.   |
| 07/2014 - 05/2016 | Technical support for the Laboratories of the Department of Industrial Management & Technology, Postgraduate Program in Industrial Management and Technology, University of Piraeus.  |
| 07/2008-11/2008   | National Greek Anthropometric Survey, funded by ELKEDE Design and Technology Centre, University of Piraeus.   |
| 03/2006-08/2007   | EPEAEK, "Development of the Graduate Studies Program in the Department of Production Engineering and Management".   |
| 06/2009 - 05/2014 | Technical support for the Laboratories of the Department of Industrial Management & Technology, Postgraduate Program in Organization and Management of Industrial Systems, University of Piraeus.   |

## Academic Positions

02/2024	Assistant Professor, Department of Industrial Management, University of Piraeus.
10/2021-2/2024	Postgraduate Courses : <ul style="list-style-type: none"><li>• <b>Industry 4.0 Systems</b></li><li>• <b>Computational Tools for Problem Solving and Analysis</b></li></ul> Department of Industrial Management & Technology, Postgraduate Program in Industrial Management and Technology, University of Piraeus
3/2021-6/2021	<b>Undergraduate Course : Industrial Analytics</b> , Department of Industrial Management & Technology, University of Piraeus.
10/2020-1/2021	<b>Undergraduate Course : Production Systems - Industry 4.0</b> , Department of Industrial Management & Technology, University of Piraeus.
09/2019-02/2020 11/2018-02/2019 09/2017-02/2018 10/2016-02/2017 10/2015-02/2016 11/2014-02/2015	Postgraduate Courses : <ul style="list-style-type: none"><li>• <b>Computer Aided Product Design</b></li><li>• <b>Computational Tools for Problem Solving and Analysis</b></li></ul> Department of Industrial Management & Technology, Postgraduate Program in Industrial Management and Technology, University of Piraeus
2004 - 2015	Teaching Assistant, Department of Industrial Management, University of Piraeus, Course: CAD/CAM/CAE systems I..

## Publications

### Articles in Scientific Journals

1. Kotzinos, A., **Canellidis, V.**, & Psychoyios, D. (2023). Informal Sector, ICT Dynamics, and the Sovereign Cost of Debt: A Machine Learning Approach. *Computation*, 11(5), 90. <https://doi.org/10.3390/computation11050090>
2. **Canellidis, V.**, & Sofianopoulou, S. (2022). Analytics Framework for Comparing National Performance Achievements in International Mathematical Olympiads. *Education Sciences*, 12(11), 838. <https://doi.org/10.3390/educsci12110838>
3. Bilalis, L., **Canellidis, V.**, Papatheodorou, T., & Giannatsis, J. (2022). Direct Digital Manufacturing of a Customized Face Mask. *Journal of Manufacturing and Materials Processing*, 6(5). <https://doi.org/10.3390/jmmp6050126>
4. Tambouratzis, T., **Canellidis, V.**, & Chalikias, M. (2021). Realizable and adaptive maximization of environmental sustainability at the country level using evolutionary strategies. *Communications in Statistics: Case Studies, Data Analysis and Applications*, 7(4), 590–623. <https://doi.org/10.1080/23737484.2021.1942326>
5. Tambouratzis, T., & **Canellidis, V.** (2014). Reward–Penalty Assignments and Genetic Algorithms for Ordinal Interval Number Group Decision Making. *International Journal of Intelligent Systems*, 29(8), 727–750. <https://doi.org/10.1002/int.21660>.
6. **Canellidis, V.**, Giannatsis, J., & Dedoussis, V. (2013). Efficient parts nesting schemes for improving stereolithography utilization. *Computer-Aided Design*, 45(5), 875–886. <https://doi.org/10.1016/j.cad.2012.12.002>.
7. **Canellidis, V.**, Giannatsis, J., & Dedoussis, V. (2009). Genetic-algorithm-based multi-objective optimization of the build orientation in stereolithography. *The International Journal of Advanced Manufacturing Technology*, 45(7), 714–730. <https://doi.org/10.1007/s00170-009-2006-y>.

8. Dedoussis, V., **Canellidis, V.**, & Mathioudakis, K. (2008). Aerodynamic experimental investigation using stereolithography fabricated test models: The case of a linear compressor blading cascade. *Virtual and Physical Prototyping*, 3(3), 151–157. <https://doi.org/10.1080/17452750802120201>.
9. **Canellidis, V.**, Dedoussis, V., Mantzouratos, N., & Sofianopoulou, S. (2006). Pre-processing methodology for optimizing stereolithography apparatus build performance. *Computers in Industry*, 57(5), 424–436. <https://doi.org/10.1016/j.compind.2006.02.004>.
10. Sofianopoulou, S., Papaioannou, A. and **Canellidis, V.** (2006), Genetic algorithm application to the cellular manufacturing problem, *Acta Mechanica Slovaca*, Vol. 2-A, pp. 469-478.

## Articles in Book Series

11. **Canellidis, V.**, Giannatsis, J., & Dedoussis, V. (2016). Evolutionary Computing and Genetic Algorithms: Paradigm Applications in 3D Printing Process Optimization. In G. A. Tsihrintzis, M. Virvou, & L. C. Jain (Eds.), *Intelligent Computing Systems: Emerging Application Areas* (pp. 271–298). Springer Berlin Heidelberg. [https://doi.org/10.1007/978-3-662-49179-9\\_13](https://doi.org/10.1007/978-3-662-49179-9_13).
12. **Canellidis, V.**, Giannatsis, J. and V. Dedoussis (2014), Heuristic schemes for the efficient utilization of 3D printing stereolithography apparatus, *Lecture Notes in Management Science*, Vol. 6, pp. 159–166.
13. Giannatsis, J., Sofos, K., **Canellidis, V.**, Karalekas, D. and Dedoussis, V. (2012), Investigating the influence of build parameters on the mechanical properties of FDM parts, *Innovative Developments in Virtual and Physical Prototyping*, P.J. Bártolo et al., Taylor & Francis Group, London, ISBN 978-0-415-68418-7.
14. **Canellidis, V.**, Dedoussis, V., Sofianopoulou, S. (2005), Application of Simulated Annealing in Improving the Performance of Stereolithography, *Virtual Modeling and Rapid Manufacturing - Advanced Research in Virtual and Rapid Prototyping*, P.J. Bártolo et al., published by Taylor & Francis, pp. 501-507.

## Books

15. Dedoussis, V., Giannatsis, I., & Kanellidis, V. (2015). *Συστήματα CAD* [Undergraduate textbook]. Kallipos, Open Academic Editions. <https://dx.doi.org/10.57713/kallipos-573>.
16. Giannatsis, I., Dedoussis, V., & Kanellidis, V. (2015). *Σύγχρονες τεχνολογίες κατασκευής με τη βοήθεια Η/Υ* [Undergraduate textbook]. Kallipos, Open Academic Editions. <https://dx.doi.org/10.57713/kallipos-572>.

## Articles in Scientific Conferences (peer-reviewed)

17. Giannatsis, J., Vassilakos, A., **Canellidis, V.** and Dedoussis, V. (2015), Fabrication of Graded Structures by Extrusion 3D Printing, *Proc. of the IEEM 2015 - IEEE International Conference on Industrial Engineering and Engineering Management*, 6-9 December, Singapore.
18. Tambouratzis, T., **Canellidis, V.**, (2013), The Scale-up Performance of Genetic Algorithms Applied to Group Decision Problems, *International Conference on Adaptive and Natural Computing Algorithms 2013*, Lausanne, Switzerland, April 4th-6th, 2013, pp.161-168, M.Tomassini et al., (eds).
19. **Canellidis, V.**, Giannatsis, J. and Dedoussis, V. (2011), Simulated Annealing Algorithm Applied to the Nesting of Parts Fabricated by Layer Manufacturing, *Lecture Notes in Management Science - Proc. 3rd Inter. Conf. on Applied Operational Research (ICAOR 2011)*, Istanbul, Vol.3, pp. 323-334.
20. **Canellidis, V.**, Giannatsis, J. and Dedoussis, V. (2010), Effective Nesting of Layer Manufacturing Fabricated Parts Using a Genetic Algorithm and a Bottom-Left Ray Casting

Procedure, International Conference on Industrial Engineering and Engineering Management (IEEM), Macao.

21. Giannnatsis, J., **Canellidis, V.** and Dedoussis, V. (2010), Determination of the Pareto-optimal build orientations in Stereolithography, International Conference on Industrial Engineering and Engineering Management (IEEM), Macao.
22. **Canellidis, V.**, Giannnatsis, J. and Dedoussis, V. (2008), Optimization of build orientation in Layer Manufacturing using an efficient heuristic approach, Proc. of Euro-uRapid 2008 - International Users' Conference on Rapid Prototyping & Rapid Tooling & Rapid Manufacturing, R. Meyer ed., Berlin, pp. 335-342.
23. Dedoussis, V., **Canellidis, V.**, Mathioudakis, K. & Papailiou, K.D. (2007), Effective Aerodynamic Modelling of Turbomachines: Results of a Practical Rapid Application, Proceedings of Euro-uRapid 2007 - International User's Conference on Rapid Prototyping & Rapid Tooling & Rapid Manufacturing, R. Meyer ed., Frankfurt, pp.125-136.
24. **Canellidis, V.**, Giannnatsis, J. and Dedoussis, V. (2006), Integrated Decision Support System for Setting-up Stereolithography Machine, Proc. of Euro-uRapid 2006 - International Users' Conference on Rapid Prototyping & Rapid Tooling & Rapid Manufacturing, Meyer R. (ed.), Frankfurt, paper B1-3.
25. Mantzouratos, N., **Canellidis, V.**, Zouzoulis, T., Dedoussis, V., and Sofianopoulou, S.(2002), Pre-Processing Software Tool for Optimizing Stereolithography Apparatus Build Performance, Proc. of Euro-uRapid 2002 - International Users' Conference on Rapid Prototyping & Rapid Tooling & Rapid Manufacturing, R. Meyer ed., Frankfurt.

## Extended Abstracts in Conferences

26. **Canellidis, V.**, Giannnatsis, J. and Dedoussis, V. (2009), "Optimizing Additive Fabrication Processes Using Evolutionary Multiobjective Optimization Techniques", 23rd European Conference On Operational Research Bonn.

## Other Publications

27. Kotzinos, A., Psychogios, D. and **Canellidis, V.** (2022), Informal sector, ICT dynamics and sovereign cost of debt. A machine learning approach, 3rd International Symposium in Finance (ISF2022) British Academy of Management.
28. Dedoussis, V., Giannnatsis, J. & **Canellidis, V.** (2015), "Operational Research Assisted 3-D Printing and Additive Manufacturing" presented in the CORS/INFORMS 2015 Joint International Meeting, 14-17 June, Montreal, Canada.

## Other Scientific Activities

Reviewer (journals):

- *International Journal of Advanced Manufacturing Technology*