

PROFESSIONAL EXPERIENCE



PERSONAL INFORMATION

Ștefan BODI

103-105 Muncii Blvd.,
400641 Cluj-Napoca, Cluj, România



Gender | M

Date of birth | [REDACTED]

Nationality | Romanian

INSTITUTION

Technical University of Cluj-Napoca, Romania

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Web of Science



Google Scholar

Web of Science ResearcherID: A-5290-2017

Scopus ID: 55513822400

ORCID: 0000-0002-8927-9698

Web of Science

H index = 4

46 citations

Scopus

H index = 4

36 citations

Google Scholar

H index = 7

119 citations

March 2022 – Present	<p>Associate Professor Technical University of Cluj-Napoca, 103-105 Muncii Blvd., 400641 Cluj-Napoca, Cluj, Romania, www.utcluj.ro Student training / teaching activities in the areas of computer aided design, computer aided robotic manufacturing, CAD-CAE-CAM systems, competitive new product development and quality management. Course responsible: Computer-aided graphics, Computer-aided design, Computer-aided robotic manufacturing, New product development, Design for quality and environment Type of activities or business sector: University education</p>
February 2018 – March 2022	<p>Lecturer Technical University of Cluj-Napoca, 103-105 Muncii Blvd., 400641 Cluj-Napoca, Cluj, Romania, www.utcluj.ro Student training / teaching activities in the areas of computer aided design, digital production engineering, virtual fabrication, computer aided robotic manufacturing, CAD-CAE-CAM systems, competitive new product development and quality management. Course responsible: Computer-aided graphics, New product development, Design for quality and environment Type of activities or business sector: University education</p>
October 2014 – January 2018	<p>Assistant Lecturer Technical University of Cluj-Napoca, 103-105 Muncii Blvd., 400641 Cluj-Napoca, Cluj, Romania, www.utcluj.ro Student training / teaching activities in the areas of computer aided design and quality management. Type of activities or business sector: University education</p>
May 2014 – November 2015	<p>Design researcher S.C. Smart Furniture S.R.L. 53 Branului Street, 400641 Cluj-Napoca, Cluj, Romania www.smartfurniture.ro Design activities for innovative furniture products and designing the corresponding technological processes. Type of activities or business sector: Research, 3D design, technology flow design.</p>
November 2013 – September 2014	<p>Technology transfer specialist Danube Transfer Center Cluj-Napoca 103-105 Muncii Blvd., 400641 Cluj-Napoca, Cluj, Romania Technology and research transfer activities to the industry Type of activities or business sector: Research, technology transfer, innovation training for companies</p>
October 2011 – July 2013	<p>Research internship Technical University of Cluj-Napoca 103-105 Muncii Blvd., 400641 Cluj-Napoca, Cluj, Romania Research activities, volunteer at Interuniversity Research Centre for Quality Management and Engineering. Type of activities or business sector: Research, development, innovation in quality management and engineering and design for quality.</p>
EDUCATION AND TRAINING	
March 2023 – June 2023	<p>Universal Design for Learning Organization: European University of Technology (EUt+) Certificate granted on: 07.07.2023</p>
February 2023	<p>Entrepreneurial competences – 86 hour training course Organization: Junior Achievement of Romania Certificate ID: R/007605</p>

July 2022	SolidWorks Advanced Training course Organization: CADWorks International Certificate ID: SWBE-060722 Principal subjects covered / professional skills acquired: Advanced 3D modeling, design and assembly techniques using SolidWorks software
October 2021	Visual Components Essentials 4.3 Training course Organization: Visual Technologies S.R.L. Certificate ID: VT010/11.11.2021 Principal subjects covered / professional skills acquired: Advanced simulation techniques for automated and robotic manufacturing cells
May 2020	External ISO quality management system auditor for ISO 9001:2015 and ISO 19011:2018 Organization: S.C. SRAC Servicii Grup S.A. Certificate no: 15218/02.06.2020
December 2018	Six Sigma Yellow Belt professional Organization: Project Management Institute, Inc. Certificate ID: 679564
August 2018 – December 2018	Fulbright-RAF researcher at the University of Rochester, New York, U.S.A Organization: Romanian-U.S. Fulbright Commission Principal subjects covered / professional skills acquired: technical entrepreneurship and entrepreneurial practices; new product and business strategies; networking with business environment representatives from New York, U.S.A. ecosystem.
July 2018	Course Process Simulate – Basic Robotic Simulation Organization: S.C. ADA Computers S.R.L. Certificate D18UTC001, 03/08/2018 Principal subjects covered / professional skills acquired: Simulation of automated, robotic manufacturing cells
October 2017 – June 2018	Psychopedagogical training program – Modules I and II Organization: Technical University of Cluj-Napoca Certificate IDs: Ac/0009203 and Ac/0009587 Principal subjects covered / professional skills acquired: Educational psychology; Classroom management; Fundamentals of pedagogy and curriculum theory and methodology; Design and management of educational programs.
October 2013 – September 2017	Doctor of Philosophy (Ph.D.) in engineering and management, Distinction: Magna Cum Laude Organization: Technical University of Cluj-Napoca, Cluj-Napoca Topic / Thesis title: Research and contributions regarding the use of the virtual environment for supporting quality management
October 2011 – July 2013	Master of Engineering in Quality Management and Engineering Organization: Technical University of Cluj-Napoca Principal subjects covered / professional skills acquired: Quality management and engineering; Quality engineering techniques and tools; Industrial metrology / Geometrical product specification (GPS); Design for quality and the environment; Six sigma; Intellectual property management; Integrated management systems; Methods and equipment for industrial process control;
August 2010 – December 2010	Erasmus mobility Organization: HAMK – University of applied sciences, Finland Principal subjects covered / professional skills acquired: Automating manufacturing processes; Industrial process control software; Practical activity: Developing an educational production line; Computer programming using “.net” language; Manufacturing equipment maintenance.
October 2007 – October 2011	Bachelor of Engineering in Robotics Organization: Technical University of Cluj-Napoca Principal subjects covered / professional skills acquired: Robot mechanics and engineering; Robotized manufacturing; Manufacturing processes technology; Industrial software; Computer aided design; Flexible manufacturing systems.
September 2003 – October 2007	High school diploma Organization: “Andrei Mureșanu” National High School, Bistrița Principal subjects covered / professional skills acquired: Computer programming; Mathematics; Physics; Chemistry; English; German

PERSONAL SKILLS

Mother tongues	Hungarian, Romanian		SPEAKING		WRITING
	UNDERSTANDING		Participating in the conversation	Oral speech	
Other known foreign languages	Listening	Reading			
English	C1	C2	C1	C1	C1
German	B2	B1	B1	B1	B1
Levels: A1/2: Elementary user - B1/2: Independent user - C1/2: Experienced user Common European Framework of Reference for Foreign Languages					

COMMUNICATION SKILLS

With over a decade of experience in academia, I have honed my skills in clear and effective communication across diverse settings and contexts. I am proficient in active listening, understanding the needs of others, and demonstrating empathy when discussing with my peers, considering at the same time various perspectives and emotions involved in the communication process. I possess strong negotiation, conflict resolution, and public presentation skills, all underpinned by adaptability and professionalism.

ORGANIZATIONAL SKILLS

Given the various academic and industry projects I was involved in during my career, I acquired the ability to prioritize, organize tasks and meet deadlines effectively. I also coordinated and successfully implemented several projects over the previous years, thus I am able to work with interdisciplinary teams, set goals, allocate resources and monitor progress to achieve the desired results. I possess the ability to promptly identify and solve problems, seeking effective and innovative solutions. I am adept at adapting to change and managing unforeseen situations in a professional and efficient manner.

SKILLS ACQUIRED AT THE WORKPLACE

- Advanced modeling and assembly capabilities of solids in 3D CAD in CATIA, SolidWorks, Autodesk AutoCAD, Autodesk Inventor;
- Advanced modeling skills for surface design in CATIA (Shape) and SolidWorks (Surfaces);
- Advanced knowledge in Computer Aided Engineering for generative structural analyses, digital mockup and machining simulation;
- Advanced knowledge in reverse engineering, high precision laser scanning and 3D reconstruction of surfaces;
- Advanced knowledge in simulating automated and robotic manufacturing cells in Visual Components and DELMIA
- Advanced knowledge in general process simulation using SigmaFlow Modeler;
- Advanced knowledge in metrology and measurements using CMMs;
- 3D Printing.

COMPUTER SKILLS

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| <ul style="list-style-type: none"> • Autodesk Autocad – advanced level • Autodesk Invetor – medium level • SolidWorks – advanced level • CATIA, 3DExperience – advanced level • DELMIA – advanced level • Process Simulate – medium level • Visual Components – medium level • Autodesk Power Inspect – advanced level | <ul style="list-style-type: none"> • VX Elements – advanced level • Artec studio – medium level • Z+F Laser Control – advanced level • SigmaFlow Modeler – advanced level • Microsoft Office software suite – advanced level • LabVIEW – medium level; • Qualica Planning Suite – advanced level • Mathcad – advanced level |
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RESEARCH PAPERS

Out of the 32 publications in total, 7 are selected and presented here:

- Dragomir, Mihai; **Bodi, Ștefan**; Iamandi, Oana; Dragomir, Diana; **Applying Sigma Flow simulation software for improving the quality of an R&D Project**, Proceedings of the 2014 International Conference on Production Research & 3rd International Conference on QIEM, pp. 152-156, ISBN 978-973-662-978-5, 1-5 July 2014, Cluj-Napoca, Romania; indexed ISI proceedings;
- **Bodi, Ștefan**; Popescu, Sorin; Drăgeanu, Călin; Popescu, Dorin; **Virtual Quality Management elements in optimized new product development using genetic algorithms**; Proceedings of the MakeLearn and TIIM Joint International conference, pp. 633-642, ISBN 978-961-6914-13-0, Bari, Italy, 27-29 May 2015;
- **Bodi, Ștefan**; Dragomir, Mihai; Banyai, Daniel; Dragomir, Diana; **Process improvements using simulation software and quality tools**, 12th International conference on Modern Technologies in Manufacturing, 14-16 October 2015, Cluj-Napoca, Romania, published in Applied Mechanics and Materials Vol. 808, 2015, pp. 376-381, ISSN print 1660-9336;
- **Bodi, Ștefan**; Comes, Radu; Weckenmann, Albert; Popescu, Sorin; **Assistive augmented environment for quality inspection and statistical process control**, Proceedings of the 2016 International Conference on Production Research & 4th International Conference on QIEM, pp. 494-499, ISBN 978-606-737-180-2, 25-30 July 2016, Cluj-Napoca, Romania; indexed ISI proceedings.
- Dragomir, Mihai; Popescu, Sorin; Neamțu, Călin; Dragomir, Diana; **Bodi, Ștefan**; **Seeing the immaterial: A new instrument for evaluating integrated management systems' maturity**; Sustainability, Vol. 9, Iss. 9, 2017, pp. 1643-1656, doi: 10.3390/su9091643, indexed ISI WoK, Q2 quartile article;
- Weckenmann, Albert; **Bodi, Ștefan***; Popescu, Sorin; Dragomir, Mihai; Hurgoiu, Dan; Comes, Radu; **Hit or Miss? Evaluating the potential of a research niche: A case study in the field of virtual quality management**; Sustainability, Vol. 11, Iss. 5, 2019, pp. 1450-1476, doi: 10.3390/su11051450, indexed ISI WoK, Q2 quartile article;
- **Bodi, Ștefan**; Gorceag, Vladimir; Buna, Zsolt-Levente; Rozsos, Raul-Silviu; Astalos, Vasile-Vlăduț; **Competitive design and prototyping of a medical device used for reducing the spread of COVID-19**, Acta Technica Napocensis – Series: Applied Mathematics, Mechanics, and Engineering, Vol. 64, Iss. 4S, 2021, pp. 609-614.

BOOKS

- Dragomir, Mihai; Iamandi, Oana; **Bodi, Ștefan**; Gohla, Robert; Chiran, Daniela; Innovation Management & Transnational partnership – Training for SMEs and Start-ups/Entrepreneurs – Handbook; Steinbeis-Edition, 2014, ISBN 978-3-95663-013-2
- **Bodi, Ștefan**; Virtual Quality Management in the Era of Industry 4.0, UTPress, Cluj-Napoca, 2020, ISBN 978-606-737-438-4, DOI: 10.13140/RG.2.2.34973.26084
- Neamțu, Călin; Popescu, Daniela; **Bodi, Ștefan**; Comes, Radu; Curta, Răzvan; SolidWorks 2016 – Îndrumător de laborator; Mega Publishing, Cluj-Napoca, 2017, ISBN 978-606-543-906-1
- Neamțu, Călin; Popescu, Daniela; Curta, Răzvan; Comes, Radu; **Bodi, Ștefan**; SolidWorks 2016 – Student's Guide; Mega Publishing, Cluj-Napoca, 2017, ISBN 978-606-543-907-8

PATENTS OF INVENTION

- Dragomir, Mihai; **Bodi, Ștefan**; Popescu, Sorin Gabriel; Solcan, Sergiu; Smartphone support with docking station, Patent no. 132018/29.10.2021

PROJECTS

International:

- 2013-2016, FP7-INCO-2013-9 R2I-ENP, Project no. 609531, **Knowledge Transfer Community to bridge the gap between research, innovation and business creation – Acronym: NoGAP**, Member in the implementation team;
- 2017-2019, Interreg Danube Transnational Programme; Contract no. DTP1-1-071-1.1; **Improving RD and business policy conditions for transnational cooperation in the manufacturing industry – Acronym: Smart Factory Hub (SFH)**, Member in the implementation team;
- 2019-2021, Erasmus+ Programme 2014-2020; Key Action 2: Strategic Partnership Projects; Agreement no. 2019-1-TR01-KA202-077366, **A Customized Education Plan Based on Industry 4.0 Competency Gaps – Acronym: CEPI4.0**, Member in the implementation team;
- 2024-2026, Interreg Danube Transnational Programme; Contract no. DRDP0200388; **Circular Innovation Hub – Acronym: CI-Hub**, Communications Director;

National:

- 2014-2015, European Fund for Regional Development, POSCCE, 12.P01.001 13 C3, **Research for developing and implementing into production innovative furniture – Acronym: SmartFurniture**, Member in the implementation team;
- 2018-2020, UEFISCDI, PN-III-P1-1.2-PCCDI-2017 – Project no. 53PCCDI/2018, **Project 1 – Painters, artwork, assignments. Protocols for establishing the paternity of medieval and premodern paintings from Romania – Acronym: IDArt**, Member in the implementation team;
- 2018-2020, UEFISCDI, PN-III-P1-1.2-PCCDI-2017 – Project no. 53PCCDI/2018, **Project 3 – Multicriterial methodologies for authenticating and establishing the paternity of medieval and premodern paintings – Acronym: IDArt**, Member in the implementation team;
- 2018-2023, National Council for Financing of Higher Education, Project no. CNFIS-FDI-2018-0438; Project no. CNFIS-FDI-2019-0579; Project no. CNFIS-FDI-2020-0496; Project no. CNFIS-FDI-2021-0199; Project no. CNFIS-FDI-2022-0615; Project no. CNFIS-FDI-2023-0460; **TUC-N Students – Entrepreneurs in the digital world – Acronym: SALT 2018, 2019, 2020, 2021, 2022, 2023**, Member in the implementation team;
- 2018, Romanian-American Foundation & Junior Achievement Romania, Contract no. JAR2019_027/20.05.2019, **Industry-Academia Problem Solving Tournament – Acronym: IMPULSE**, Director;
- 2020-2022, EEA Grants, Financing contract no. RO-CULTURA-A1-6/2020/31.01.2020, **Horea's Church – A heritage for the future. Capitalizing on an 18th century architectural monument through virtual reality – Acronym: CALL01-16**, Member in the implementation team;
- 2020-2022, UEFISCDI, PN-III-P2-2.1.-2.1.2.-PED-2020 – Project no. 345PED/2020, **Smart hospital bed – Acronym: HOPE**, Member in the implementation team;
- 2020-2022, UEFISCDI, PN-III-P1-1.1.-TE-2020 – Project no. 132TE/2020, **Mass digitization of cultural heritage: between myth and reality. Evaluating the accuracy of 3D models generated using the photogrammetry method in the case of cultural heritage – Acronym: AtOP**, Member in the implementation team;
- 2020-2022, Human Capital Operational Program 2014-2020, Call code: POCU/626/6/13, Project no. 130354 (SMIS code), **Advanced practice for success in the engineering career – Acronym: PAVING**, Member in the implementation team;
- 2020-2022, Administrative Capacity Operational Program 2014-2020, SIPOCA Code / SMIS 2014+: SIPOCA 704 / SMIS 129878, **Strategic framework for the adoption and use of innovative technologies in public administration 2021-2027 – Solutions for the efficiency of the activity**, Member in the implementation team;
- 2021-2026, RAAL S.A., Framework collaboration agreement no. 1400/19.01.2021: **Industrial 3D measurement and scanning services and related consultancy**, Contract Director;
- 2021-2026, Modulo Decorative Solutions S.R.L., Framework collaboration agreement no. 3876/15.02.2021: **Industrial 3D scanning and CAD modeling services**, Contract Director;
- 2021-2026, AviTech Co. S.R.L., Framework collaboration agreement no. 9471/12.04.2021: **3D scanning and processing services**, Contract Director.

CONFERENCES / JOURNALS

- **Member of the organizing committee of the International Conference on Quality and Innovation in Engineering and Management:** 2012, 2014, 2016, 2018;
 - **Member of the organizing committee of the International Conference on Production Research – Regional Conference – Africa, Europe and the Middle East:** 2014, 2016, 2018, 2023;
 - **Conference chair at Session 3.6 at the 27th International Conference on Production Research 2023.**
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PRESENTATIONS

- **2017 Bodi, Ștefan;** Dragomir, Mihai; Dragomir, Diana; Trends and opportunities for innovation in the field of furniture, expoDESIGNwood, March 30th – April 1st 2017, Brașov, Romania;
 - **2021 Bodi, Ștefan;** Reverse engineering in medical applications; BRIGHT Summer School 2021 (Boosting the scientific excellence and innovation capacity of 3D printing methods in pandemic period, Online event);
 - **2023 Bodi Ștefan;** Customer value proposition, Guest lecturer at the 2023 International #Entrep-Bootcamp, Technical university of Cluj-Napoca, Romania.
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AWARDS

- **2015 Best paper award** at the IETEC-BRCEBE International Conference, pp. 78-86, ISBN 978-0-646-94781-5, 1st-4th November 2015, Sibiu, Romania;
 - **2016 Pro Invent International Invention Fair, XIV Edition, 2016, Cluj-Napoca, Romania, Diploma of excellence and gold medal with special mention** for Patent no. 132018/29.10.2021: Smartphone support with docking station;
 - **2019 Junior Achievement Romania, Special mention** awarded at the JA Hall of Fame gala for the participation and implementation of a project financed by the "Entrepreneurial University" program, Bucharest, May 2019.
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Cluj-Napoca
24.09.2024

Assoc Prof. Eng. Ștefan BODI, Ph.D.