

Tadele Belay Tuli

University of Siegen
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URL-ACADEMIC: <https://protech.mb.uni-siegen.de/fams/team/tuli.html>

URL-PERSONAL: <https://tadeletuli.github.io>

Born: June 07, 1986, Shambu, Ethiopia

Nationality: Ethiopian

Current position

Research associate, University of Siegen, Germany

Areas of specialization

Human robot collaboration (HRC); Motion modeling and control for HRC; Industrial automation

Appointments held

2008 - 2010	Graduate assistant, Adama Science and Technology University, Ethiopia
2010 - 2012	Assistant lecturer, Adama Science and Technology University, Ethiopia
2015 - 2017	Lecturer, Addis Ababa Science and Technology University, Ethiopia
2017 - Now	Research Associate, University of Siegen, Germany

Education

2008	B.Sc. in Mechanical Engineering, Bahir Dar University, Ethiopia
2012	M.Sc. in Manufacturing Engineering, Adama Science and Technology University, Ethiopia
2015	M.Sc. in Mechatronics Engineering, University of Trento, Italy

Grants, honours & awards

2012	Opera Universitaria scholarships, University of Trento, Italy
2016	Best instructor of the Electromechanical Engineering department, AASTU
2016	Merit award, University of Trento, Italy

Publications & talks

JOURNAL ARTICLES

- 2019a **Tuli, Tadele Belay**; Cesarini, Andrea (2019), "Automated Unsupervised 3D Tool-Path Generation Using Stacked 2D Image Processing Technique", *Journal of Manufacturing and Materials Processing* Vol.3(4): 84.
<https://doi.org/10.3390/jmmp3040084>
- 2019b Terefe, T. O., Lemu, H. G., K/Mariam, A., **Tuli, T. B.** (2019). "Kinematic Modeling and Analysis of a Walking Machine (Robot) Leg Mechanism on a Rough Terrain", *Advances in Science and Technology Research Journal* 13 no. 3: 43-53.
<https://doi.org/10.12913/22998624/109792>
- 2020a **Tuli, Tadele Belay**; Terefe, Tesfaye Olana, Ur Rashid, Md Mamun (2020), "Telepresence Mobile Robots Design and Control for Social Interaction", *Int J of Soc Robotics*
<https://doi.org/10.1007/s12369-020-00676-3>.
- 2020b Reuter, Jonas, **Tuli, Tadele Belay**, Manns, Martin and Engel, Bernd (2020), "Roboterunterstütztes Biegen von Verbundrohren", *BD 162 NR.12 P.49-51*
- 2020c Frohn-Sörensen, P., Geueke, M., **Tuli, T. B.**, Kuhnhen, C., Manns, M., & Engel, B. (2020, December 14)., "3D printed prototyping tools for flexible sheet metal drawing", *Under review*
<https://doi.org/10.31224/osf.io/w8rgb>.

CONFERENCES

- 2018 **Tuli, Tadele Belay** (2018), "Mathematical Modeling and Dynamic Simulation of Gantry Robot Using Bond Graph", *Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering* 4: 513
https://doi.org/10.1007/978-3-319-95153-9_22.
- 2019a **Tuli, Tadele Belay**; Manns, Martin (2019), "Hierarchical motion control for real time simulation of industrial robots", *Procedia CIRP* 17: 132-148
<https://doi.org/10.1016/j.procir.2019.03.181>.
- 2019b **Tuli, Tadele Belay**; Manns, Martin (2019), "Real-time motion tracking for humans and robots in a collaborative assembly task", *Procedia MDPI*
<https://doi.org/10.3390/ecsa-6-06636>.

THESIS

- 2008 Tuli, Tadele Belay (2008), "Design of Solar based water purification system", (B.Sc. in Mechanical Engineering).
- 2012

Tuli, Tadele Belay (2012), "Finite Element Analysis of Bus Body Structures: Case study at Bishoftu Automotive and Locomotive Industry, Ethiopia" (M.Sc. in Manufacturing Engineering), LAP Lambert Academic Publishing ISBN-13: 978-3-659-25932-6

2015 Tuli, Tadele Belay (2015), "Task and path planning of industrial manipulator robot", (M.Sc. in Mechatronics Engineering),
<http://www5.unitn.it/Biblioteca/en/Web/TesiDocente/193537>

Teaching

2008 - 2012 Engineering Mechanics II (Dynamics) (B.Sc., ASTU, Ethiopia)
2015/16 Computer Integrated Manufacturing (B.Sc., AAiT, AAU, Ethiopia)
2016 - 2017 Introduction to Robotics and Control, Industrial Automation (B.Sc., AASTU)
2018 Automatisierteproduktionprozesse (B.Sc., Uni-Siegen, Germany)
2019 - now Automation and Industrial Communication (M.Sc., Germany)
2020 - now Industrial Robotics (M.Sc., Germany)

Service to the profession

2015 - Now Graduate student member of IEEE, RAS
2018 - Now Member Ethiopian Society of Mechanical Engineers (ESME)