PERSONAL INFORMATION

Tomáš Koutecký

Brno University of Technology
Faculty of Mechanical Engineering
Institute of Machine and Industrial Design
Assistant Professor
Dept. of Reverse Engineering and Additive Technologies
Technická 2896/ 2, Brno, 61669, Czech Republic
+420 541 144 911 +420 775 099 443

tomas.koutecky@vut.cz
www.3Dlaboratory.cz
https://www.researchgate.net/profile/Tomas_Koutecky

Sex Male | Date of birth 10/08/1986 | Nationality/ ČR

WORK EXPERIENCE

from 2015 — Assistant Professor
Department of Reverse Engineering and Additive Technologies

2014 – 2015 — Assistant at research group 3D optical diagnostic
NETME Centre, Faculty of Mechanical Engineering, Brno University of Technology

2011 - 2015 — Assistant
Institute of Machine and Industrial Design, Faculty of Mechanical Engineering, Brno University of Technology

EDUCATION AND TRAINING

2015 — Ph.D.
Institute of Machine and Industrial Design, FME Brno University of Technology

2010 — Ing.
Institute of Machine and Industrial Design, FME Brno University of Technology

2008 — Bc.
Faculty of Mechanical Engineering, Brno University of Technology

EXPERTISE

- Since 2010 – 3D optical digitization and its automation, quality control, reverse engineering
- Since 2016 – Additive manufacturing

PROJECTS

Basic (frontier) research
Applied research

2017-2020, TAČR Epsilon TH03010172 - Research and development of 3D printers for use in construction industry.
2018-2021, ESA 4000123317/18/NL/GLC/hh – Additive Design for Aerospace Applications Capabilities (ADAAC)

Educational projects

CONTRACTUAL RESEARCH

Contracts

- Over 30 contracts
- Main Partners: ING Corporation, BBA Hranice, Honeywell, ITW Pronovia, TRW, Strojírny Bohdalice, AŽD Praha, Robert Bosch, One3D, Novatech

PEDAGOGICAL ACTIVITIES

Vyučování v magisterském programu

- CAD Modeling (ZM1)
- 3D Optical Digitization and Inspection of Machine Parts (ZRI-A)
- 3D Digital Technology and CAD (RS1)
- Team project (ZKP)

Teaching in the Bachelor's program

- Mechanical Design Project (ZIP)
- CAD (3CD)
- Machine Design - Mechanisms, 3D Print and Solidworks (6KM)

SCIENTOMETRIC INDICATORS

Publication

5 articles in IF journals IF
5 proceeding articles (international congresses, symposia and conferences)

Citation by Web of Science

38 citací
H-index: 3
Vedidk: 7918704
Researcher ID: F-3858-2012

Selected publications

- Koutecký, T.; Brandejs, J.; Paloušek, D. Metodika automatizace fotogrammetrického měření systémem TRITOP. In Sborník referátů. Ostrava: Vysoká škola báňská - Technická univerzita Ostrava, 2011. p. 121-126. ISBN: 978-80-248-2450- 5.
- Koutný, D.; Paloušek, D.; Koutecký, T.; Zatočilová, A.; Janda, M. 3D Digitalization Of The Human Body For Use In Orthotics And Prosthetics. An international Journal of Science, Engineering and Technology, World Academy of Science Engineering and Technology, 2012, vol. 2012, no. 72, p. 1000-1005. ISSN: 2010- 376X.
- Koutecký, T.; Paloušek, D.; Brandejs, J. Analysis of sheet metal parts behaviour during fringe projection based digitization. In Sborník příspěvků z mezinárodní vědecké konference MMK2013, Mezinárodní Masarykova konference pro doktorandy a mladé vědecké pracovníky. Hradec Králové: Magnanimitas, 2013. p. 3499-3508. ISBN: 978-80-87952-00- 9.
- Koutecký, T.; Paloušek, D.; Brandejs, J. Method of photogrammetric measurement automation using TRITOP system and industrial robot. OPTIK, 2013, vol. 124, no. 18, p. 3705-3709. ISSN: 0030-4026.
- Paloušek, D.; Omasta, M.; Koutný, D.; Bednář, J.; Koutecký, T.; Dokoupil, F. Effect of matte coating on 3D optical measurement accuracy. OPTICAL MATERIALS, 2015, vol. 40, no. 1, p. 1-9. ISSN: 0925- 3467.
- Koutecký, T.; Paloušek, D.; Brandejs, J. Application of a reflectance model to the sensor planning system. In PROCEEDINGS OF SPIE - Automated Visual Inspection and Machine Vision. Proceedings of SPIE. Munich, Germany: SPIE, 2015. p. 953005- 1 (953005-13 p.)ISBN: 9781628416909. ISSN: 0277- 786X.
- Koutecký, T.; Paloušek, D.; Brandejs, J. Sensor planning system for fringe projection scanning of sheet metal parts. MEASUREMENT, Journal of the International Measurement Confederation (IMEKO), 2016, vol. 94, no. December 2016, p. 60-70. ISSN: 0263-2241.
- Koutecký, T.; Zikmund, T.; Glittová, D.; Paloušek, D.; Živčák, J.; Kaiser, J. X-ray micro- CT measurement of large parts at very low temperature. Review of Scientific Instruments, 2017, roč. 88, č. 3, s. 033707- 1 (033707-6 s.)ISSN: 0034-6748.
- Hruboš, D.; Koutecký, T.; Paloušek, D. An experimental study for determination of an application method and TiO2 powder to ensure the thinnest matte coating layer for 3D optical scanning. MEASUREMENT, Journal of the International Measurement Confederation (IMEKO), 2018, roč. 136, č. March 2019, s. 42-49. ISSN: 0263-2241.