

CURRICULUM VITAE

PERSONAL DETAILS

Name **DR. CSABA HORVÁTH**
Address **1114 Budapest, Károli Gáspár tér 8, 1 em. 1 a.**
Telephone **+36-20-467-0326**
E-mail horvath.csaba@gpk.bme.hu
Date of birth 1980. 11. 20.

LANGUAGES

ENGLISH, upper level (single language, C2 type upper level language exam)
HUNGARIAN, upper level (single language, C2 type upper level language exam)
Spanish, beginners level (two language, B2 type beginners level language exam)

EDUCATION

- Date 2007-2010
- Name of institution **Budapest University of Technology and Economics, Budapest**
Doctoral (PhD) Studies, Faculty of Mechanical Engineering, Department of Fluid Mechanics
Doctor (PhD)
- Degree
- Date 2007. December 3-7
- Name of institution **von Kármán Institute for Fluid Mechanics, Brussels, Belgium.**
Lecture series: Basics of Aeroacoustics and Thermoacoustics
- Date 2005-2007
- Name of institution **Budapest University of Technology and Economics, Budapest**
MSc Studies, Faculty of Mechanical Engineering, Specialization in Fluid Mechanics and Applied Mechanics
MSc in Mechanical Engineering
- Degree
- Date 2001-2005
- Name of institution **Budapest University of Technology and Economics, Budapest**
BSc, Faculty of Mechanical Engineering
BSc in Mechanical Engineering
- Degree
- Date 2000-2001
- Name of institution **Magyar Nyelv Intézet, Budapest**
Hungarian studies
Certificate
- Degree
- Date 1999-2000
- Name of institution **Cleveland State University, Cleveland, Ohio, United States of America**
BSc, Faculty of Mechanical Engineering
Completed the 1st year of a 4 year program.
- Degree

PROFESSIONAL EXPERIENCE

- Date 2010. September – 2013. September, 2013. September – 2015. July, 2015. July – 2016. July, 2016. July – 2019. October, **2019. October – 2022. June, 2022. June-**
- Name of institution and address **Budapest University of Technology and Economics, Department of Fluid Mechanics**
Budapest
- Type of institution **University**
- Position Junior Assistant Professor, Research Assistant, Assistant Professor and Assistant to the Head of the Department, Assistant Professor and Deputy Head of the Department, Assistant Professor, Deputy Head of the Department (BME Department of Fluid Mechanics), and Deputy Principal (BME BME-AUDI K3), **Associate Professor, Deputy Head of the Department (BME Department of Fluid Mechanics), and Deputy Principal (BME BME-AUDI K3)**
- Main assignments and responsibilities Carry out research and educational assignments, as well as participating in industrial projects. As Deputy Head of the Department, help the Head of the Department in running the institution: preparing documents, carrying out administrative tasks, substitution of the Head of the Department, carrying out human resources related assignments. As Deputy Principal at the BME-AUDI K3, help the Principal in running the BME-AUDI K3: Build and sustain relationships with the partner, initiation of collaborations, initiation of joint grant proposals, and carrying out administrative assignments.
- Date 2010. June – 2010. September, 2011. June – 2011. September, 2012. June – 2012. September
- Name of institution and address **NASA Glenn Research Center** Cleveland
- Type of institution **Research Institute**
- Position Research Engineer
- Main assignments and responsibilities Carried out and analyzed CFD (Computational Fluid Dynamics) simulations on a Counter-Rotating Open Rotor (CROR). Processed phased array microphone measurements of CROR using beamforming technology.
- Date 2008. June – 2008. August
- Name of institution and address **NASA Glenn Research Center** Cleveland
- Type of institution **Research Institute**
- Position Intern
- Main assignments and responsibilities Carried out phased array microphone measurements on a turbofan engine and then processed the results using beamforming technology.
- Date 2006. July – 2006. August, 2007. February – 2007. August
- Name of institution and address **Siemens Erőműtechnika Kft.** Budapest
- Type of institution **Engineering Firm**
- Position Intern
- Main assignments and responsibilities Investigated a steam turbine inlet using CFD (Computational fluid Dynamics) as well as FSI (Fluid Structure Interaction) simulations.
- Date 2004. June – 2004. August
- Name of institution and address **NASA Glenn Research Center.** Cleveland, Ohio, United States of America
- Type of institution **Research Institute**
- Position Intern
- Main assignments and responsibilities Processed dynamic pressure measurement data from a turbofan wind tunnel test from an acoustic point of view. Carried out Hot-wire, LDA, and Cobra probe calibrations/measurements.
- Date 2000. June – 2000. August
- Name of institution and address **Brunel Engine Research Group, Brunel University.** London, England
- Type of institution **Research Institute/ University**
- Position Intern
- Main assignments and responsibilities Participated in diesel engine research, designing and building a test rig, as well as creating a program for processing the test data.

AWARDS/GRANTS/SCHOLARSHIPS

TKA-DAAD Grant (Proposal number 169040) Programmes for Project-Related Personal Exchange (PPP), 2022-2023.

Certificate of Recognition (for outstanding research work carried out within the framework of the János Bolyai Research Fellowship, 2017-2020), Hungarian Academy of Sciences, János Bolyai Research Fellowship Board of Trustees, 2021.

BME Scholarship Program, Knorr-Bremse Rail Systems Budapest, Reduction of noise occurring during the venting of a pressure vessel, second phase: measurement, 2021.

OTKA K Grant (Contract no. 138176) Development and application of open cell based photoacoustic systems for measuring the exchange of ammonia and water vapour between surface and air, senior participant, 2021-2025.

Erasmus + Staff Mobility for Training, 2019 (Otto-von-Guerike-Universität Magdeburg).

Erasmus + Staff Mobility for Teaching, 2019 (Karlsruher Institut für Technologie), 2019 (University of Twente), and 2018 (Karlsruher Institut für Technologie).

Új Nemzeti Kiválósági Program ÚNKP-19-4 Bolyai + scholarship, 2019-2020.

OTKA K Grant (Contract no. 129023) Elaboration of new methods for noise mapping of ducted axial fans, participant, 2018-2022.

Új Nemzeti Kiválósági Program ÚNKP-18-4 Bolyai + scholarship, 2018-2019.

Commendation of the Dean, 2018.

János Bolyai research fellowship, 2017-2020.

OTKA K Grant (Contract no. 119943) Aeroacoustic and aerodynamic investigation of counter-rotating open rotors, utilizing beamforming methods, senior participant, 2016-2019.

Harold V Disney Prize, Institution of Mechanical Engineers (Given for the best paper published by the institution in the previous year), 2015.

OTKA K Grant (Contract no. 112277) Development of a phased microphone array diagnostic method to support noise and loss reduction in axial flow fans, participant, 2014-2018.

OTKA K Grant (Contract no. 83807) Concerted investigation of aerodynamic and noise generation mechanisms in highly-loaded axial flow rotor blade rows, participant, 2011-2014.

Bizáky Puky Péter Emlékalapítvány Scholarship, 2010.

MVM Pro Progresszió Alapítvány Scholarship, 2009.

Öveges József Program HEF_06_3 (BMEGPK06), 2007.

National Academic Students League (OTDK), participation, 2007.

Academic Students League (TDK), second place, 2006.

National Doctoral Studies Scholarship (Doctoral (PhD) Studies), 2007-2010.

National Scholarship (MSc Studies), 2005-2007.

Student of the Year, Budapest University of Technology and Economics International Union on behalf of International Students, 2002-2003 academic year.

Certificate of Merit, Budapest University of Technology and Economics, 2002-2003 academic year.

14. Számú Görgy Arthur Cserkészcsapat Scholarship, 2001-2002 academic year.

Collegium Hungaricum Juventus Occidentalis Scholarship, 2000-2001 academic year.

American Scholars National Honor Society, 2000 spring semester.

Dean's List, Cleveland State University, 2000 spring and 1999 fall semesters.

Spring Full Semester Scholarship, Cleveland State University Presidential Scholarship Committee, 2000 spring semester.

Fall Full Semester Scholarship, Frank J. Ambrose Engineering Scholarship committee, 1999 fall semester.

Outstanding Performance and Academic Achievement Award 1999/2000, Advanced Manufacturing Center, 2000.

Outstanding Worker and Student Scholarship Fall 1999, Advanced Manufacturing Center, 1999.

PUBLICATIONS

<https://m2.mtmt.hu/gui2/?type=authors&mode=browse&sel=10041387>

<https://tudomanyometria.com/?mtmtid=10041387>

<https://scholar.google.com/citations?pagesize=100&user=VvpKhZ4AAAAJ>

SCIENTIFIC COMMITTEES

• Associations

- Hungarian Academy of Sciences, member: 2018- , Complex Committee on Acoustics, member: 2021-

- American Institute of Aeronautics and Astronautics (AIAA), member: 2015-2021, senior member 2021-

- American Chamber of Commerce in Hungary (AmCham Hungary), member: 2020-

• PhD Committees

Gergely Csány, 2020, Pázmány Péter Catholic University, Faculty of Information Technology and Bionics, Roska Tamás Doctoral School of Sciences and Technology, committee member

• Editorial Board Member

Guest Editor: Selected papers presented at the Conference on Modelling Fluid Flow, Technische Mechanik Volume 39, Issue 1 2019. pp. 1-184. (2019)

• Conference Committees

Guest Editor: *Noise and Vibration Worldwide*, Vol. 48, Issue 3-4 2017. pp. 35-55. (2017)

International Journal of Aeroacoustics, 2016-

Guest Editor: Special Edition regarding Turbomachinery Aeroacoustics, *International Journal of Aeroacoustics* 15:(1-2) 2016. pp. 1-228. (2016)

- Secretary of 15th European Conference on Turbomachinery, Fluid Dynamics, and Thermodynamics (2023).

- 24th International Congress on Acoustics (ICA 2022), 2022

- INTER-NOISE Congress (annually), 2020-

- 21st Workshop of the Aeroacoustics Specialists Committee of the CEAS (2017)

- International Conference on Fan Noise, Technology and Numerical Methods (every three years), 2016-

- Conference on Modelling Fluid Flow (CMFF) (every three years), 2015-, Secretary of International Scientific and Programme Committee: Conference on Modelling Fluid Flow (CMFF), 2017-

• Review Committees

- AIAA Undergraduate Scholarship: 2022

- AIAA Graduate Scholarship: 2022

- INTER-NOISE Congress: 2020, 2021

- Journal of the Acoustical Society of America: 2020

- Fulbright Commission: 2019, 2020, 2021

- Journal of Aerospace Engineering: 2018

- Acta Acustica united with Acustica: 2018

- International Conference on Fan Noise, Technology and Numerical Methods: 2018

- Applied Acoustics: 2017

- European Conference on Turbomachinery, Fluid Dynamics, and Thermodynamics: 2017, 2019, 2021, 2023

- AIAA Journal: 2016, 2017, 2020, 2021

- ASME Turbo Expo Conference: 2016, 2018, 2020

- Journal of Mechanical Engineering Science: 2015, 2016

- Periodica Polytechnica Mechanical Engineering: 2015, 2018

- Conference on Modelling Fluid Flow (CMFF): 2015, 2018, 2022