Dr. Péter Tamás Nagy · Research fellow· Budapest, Hungary · **pnagy@hds.bme.hu**

CV | Dr. Péter Tamás Nagy

- Status: Research fellow
- Research fields: Aeroacoustics, Hydrodynamic instabilities
- Software exp.: MATLAB, ANSYS CFX, FreeFem

Experience

2019/01 - 2020/08 **Research fellow** — Budapest University of Technology and Economics (BME)

- Research: Drag reduction, non-linear stability analysis
- Lecturer: Numerical Simulation of Fluid Flows (BSc); Signal processing (MSc),Numerical Simulation of Fluid Flows (BSc)

2019/01 - 2020/08 **Assistant professor** — BME

2018/01-2018/12 **Research assistant** — BME

- Research: Stability properties of planar jets, mathematical modelling of the edge-tone
- Teaching: Numerical Simulation of Fluid Flows (BSc), Chemical Engineering Fundamentals (BSc),Introduction to Mechanical Engineering (BSc)

2013/07-2013/12 **Analysis Engineer Trainee** — AVL AUTÓKÚT Kft., Budapest

- Multibody simulations, Dynamic and Modal Analysis
- Fatigue Analysis

Education

2015 - 2018 **PhD** — BME

- Research: Stability properties of planar jets, mathematical modelling of the edge-tone
- Teaching: Numerical Simulation of Fluid Flows, Chemical Engineering Fundamentals,Introduction to Mechanical Engineering

2013-2015 **Mechanical Engineering Modelling (MSc)** — BME

- Master Thesis: Aeroacoustic simulation of cavity tone (TU Wien)
- Modules: Fluid mechanics, Solid mechanics

2009 - 2013 **Mechatronics Engineering (BSc)** — BME

- Final project: Fatigue investigation on vehicle parts by dynamic simulation (AVL)
- Module: Mechanical modelling

2005-2009 **General Certificate of Secondary Education**
Nagy Lajos Secondary Grammar School, Szombathely

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Awards and scholarships

2018 **Article competition of Pro Progressio foundation and Journal of Élet és Tudomány (Life and Science)**
1st place

2017-2018 **Új Nemzeti Kíválóság Program (New National Excellence Program) scholarship**
Ministry of Human Capacities

2016-2017 **Új Nemzeti Kíválóság Program (New National Excellence Program) scholarship**
Ministry of Human Capacities

2015 **Varga József award**
Excellent diploma thesis in the field of fluid dynamics

2014 **Erasmus scholarship**
One semester at TU Wien

2013 **Rector's Special Award**
Excellent paper on the student's conference

Most important publications Link

2021 P. Nagy, A. Szabó, Gy. Paál, : A feedback model of the edge tone, using the adjoint Orr-Sommerfeld equation, *JOURNAL OF FLUID MECHANICS*, 915, 2021

2020 A. Szabó, P. Nagy, Gy. Paál, : Numerical simulation of an acoustically excited plane jet in an incompressible framework and comparison with experimental data, *JOURNAL OF THE ACOUSTICAL SOCIETY OF AMERICA*, 147:5, 2020

2019 P. Nagy, Gy. Paál, : Stabilization of the boundary layer by streamwise control, *Physics of Fluids*, 2019

2017 P. Nagy, Gy. Paál, : Modelling the perturbation growth in an acoustically excited plane jet, *Physics of Fluids*, 29:11, 2017, (p. 114102)

Languages

Hungarian **Native**

English **Fluent**

German **Basic**

Further activities

2016 **Formula Student East Design Judge (Aerodynamics)**

2014 **Formula Student Hungary Scrutineer, Special Award Judge**

2011-13 **Mechanical Design Engineer - BME Formula Racing Team**
2011-12 Drivetrain project leader
2012-13 Monocouque developer

2009, 2010 **Bosch Elektromobil competition-Team captain**
Design and build a one seat race car propelled by 6 drills

Hobbies

Hiking

Biking

Sailing

Playing card board games