

Alireza JAFARINIA

Computational Fluid Dynamics Expert



in [linkedin.com/in/alireza-jafarinia-7a013b7b](https://www.linkedin.com/in/alireza-jafarinia-7a013b7b) **Publications :** Google Scholar
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📍 Münzgrabenstrasse 147/3, 8010 Graz, Austria (AT)
i Born 23/03/1989 in Shiraz, Iran (IR)

COMPETENCES

Programming Matlab, Python, C++, FORTRAN, Latex
Software OpenFOAM, ANSYS ICEM, Fluent, and CFX, COMSOL Multiphysics, AutoCAD, CATIA, SOLIDWORKS, Tecplot, ParaView, Coreform Cubit, Microsoft Office

PROFESSIONAL EXPERIENCE

- Present** | **Postdoc researcher, GRAZ UNIVERSITY OF TECHNOLOGY, Austria**
Dec 2022 > Supervision, CFD and Multiphysics simulations for the development of digital twins
Digital twins Electromagnetic simulations
- 2022** | **PhD student | Project assistant, GRAZ UNIVERSITY OF TECHNOLOGY, Austria**
2018 > Model development, CFD and multiphysics simulations, part of the LEAD Project : mechanics, modeling, and simulation of aortic dissection
Patient-specific simulations Thrombosis Sensitivity analysis Impedance cardiography (ICG) Non-Newtonian fluid FSI
- Mar 2020** | **Guest researcher, IMPERIAL COLLEGE LONDON, UK**
> Thrombosis model implementation in OpenFOAM and Ansys CFX
Thrombus formation in Patient-specific morphologies
- 2017** | **CFD engineer, MR CFD COMPANY/FREELANCE, Iran**
2013 > Programming, simulations of transport phenomena, laminar and turbulent flow and heat transfer, CFD consultant and teacher
Immersed bodies Turbomachinery Heat exchanger Two-phase flow in porous media
- 2011** | **Internship, PETROCHEMICAL INDUSTRIES DESIGN AND ENGINEERING COMPANY (PIDEC), Iran**
2011 > Fluid mechanics and rotary engineer
Fluid dynamics Aerodynamics Vendor negotiation
- 2010** | **Teaching assistant, PERSIAN GULF UNIVERSITY, Iran**
2009 > Courses : Fluid mechanics, Statics, Dynamics
Teaching Supervision

LANGUAGES

English ●●●●●
Farsi ●●●●●
German ●●○○○

INTERESTS

- > Computational fluid dynamics
- > Multiphysics simulations
- > Digital twinning

EDUCATION

- 2018-2022 PhD in Mechanical Engineering, Graz University of technology (TU Graz)
2017-2018 Selected courses in Applied and Computational Engineering, University of Bergen (UiB)
2011-2013 MSc in Mechanical Engineering and Energy Conversion, Yazd University (YU)
2007-2011 BSc in Mechanical Engineering, Heat and Fluid Mechanics, Persian Gulf University (PGU)

REFERENCES

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