Robin **Sebastian**

Addresse:	Kapellenstraße 7, 52066 Aachen
Telephone:	01747544055
Email:	sebastian.robin91@gmail.com
Date of birth:	14.07.1991
Civil status:	Married, one child
Website:	rsebastian91.github.io

Profile

I have 7 years of experience in the CFD and CAA simulations and analysis of complex flows, software development, usage of HPC resources and signal processing. I strongly believe in teamwork, collaboration and mentoring, and I am experienced in successfully leading and managing groups. I am seeking a job to further advance my career by utilizing all the skills and experience gained in all these years.

Work experience

03/2019 – Present **Researcher, RWTH Aachen University, Aachen**

- Work on the DFG project under Emmy-Noether Program "Separation control with air jet vortex generator arrays in transonic and supersonic flow".
- **Methods & tools:**
- Extension of the in-house code written in C++, usage of HPC resources for LES and RANS, implementation of post-processing routines using Python, visualization and analysis of large datasets; publication and presentation of the results in journals and conferences.
- Supervision of Bachelor and Master theses.
  Key achievements:
- Development of promising and flexible flow control method for improved aerodynamics and efficiency of aerospace systems.
- Fruitful collaboration with experimentalist to expand scientific horizon.
- Collaborate on writing a successful proposal for a computational grant (150 million core hrs).
- Involve in the successful organization of EUROMECH Colloquium 612.

10/2015 – 11/2018 **Researcher, INSTITUT PPRIME, Poitiers, France**

- Work on the project "Numerical simulation of acoustic propagation in a turbulent channel flow with an acoustic liner".
  Methods & tools:
- Develop in-house code using FORTRAN with MPI to perform high-order DNS and implicit LES; implement parallel data processing routines for analysis of large datasets; usage of HPC resources; publication and presentation of the results in journals and conferences.
- Supervision of M.Sc. student projects.
  Key achievements:
- Research activities leading to doctoral dissertation.
- Won the 3MT competition.
- Fruitful collaboration with INSTITUT PPRIME and ED-SIMMEA in the planning and organization of Journée des Doctorants 2017.
- Successfully lead and managed a team of 11 volunteers to organize JDD 2017.

03/2015 – 09/2015 **Internship, CENAERO, Belgium**

- Work on the project "Computation of acoustic propagation around an aeronautical configuration (typically nacelle) and implementation of non-reflecting conditions".
  Methods & tools:
- Extension of the commercial software ArgoDG based on Discontinuous Galerkin method written in

C++; implementation of linearized Euler equations, boundary conditions, coupling between CFD and CAA solvers, and post-processing filters; usgae of HPC resources.
Key achievements:
- Research activities leading to a M.Sc. dissertation.
- Successful in obtaining the ERASMUS+ mobility scholarship.
- Fruitful collaboration with TMSDBE group at CENAERO to define a testcase and obtain CFD results.

Education

10/2015 – 11/2018	**Ph.D. in Acoustics, University of Poitiers, France** Thesis: Numerical simulation of acoustic propagation in a turbulent channel flow with an acoustic liner. Graduated with highest honors.
10/2015 – 11/2018	**M.Sc. in Turbulence, Ecole Centrale de Lille, ENSMA and ENSIP, France** Thesis: Computation of acoustic propagation around an aeronautical configuration (typically nacelle) and implementation of non-reflecting conditions. Graduated with highest honors. CGPA (French system): 15.5/20.0 for M1 and 16.2/20.0 for M2.
10/2015 – 11/2018	**Bachelor's degree in Aerospace Engineering, National Aerospace University, Ukraine** Thesis: "IRIS"-MID TRANSPORT AIR PLANE - Designing of Middle spar, Engine Mount and Power-plant System. Graduated with "Red" diploma - "summa cum laude".

Voluntary experience

01/2018 – Present	**Treasurer of IMP – Turbulence Alumni Association, France**
12/2016 – 03/2017	**Co-organiser of Journée des Doctorants 2017, ED SIMMEA, INSTITUT PPRIME, France** Recruitment and coordination of a team of 11 volunteers.

Awards

03/2018	**Winner of Three Minute Thesis (3MT) competition** Presentation of Ph.D. research topic in three minutes to general public.
03/2015 – 09/2015	**Erasmus+ scholarship** Mobility scholarship for writing the Master's thesis.

Language

English – Fluent   **German** – good   **French** – basic

Skills

Programming – FORTRAN, C++, Python, MPI, Matlab, Latex

Softwares – Catia, Pointwise, Gmsh, Paraview, MS Office, Star-CCM+

Aachen, 18 April, 2022