

ROSTER

Name/Term		Area of Research
Postdoctoral Fellows		
ADLER, Dr. Michael 07/2019–present	(Ph.D. Aeronautical and Astronautical Engineering, 2019, Ohio State University, USA)	Shock-boundary-layer interactions, wall modeling, Richtmyer-Meshkov instability and elastic/plastic deformation of interfaces
BANKO, Dr. Andrew 02/2018–present	(Ph.D. Mechanical Engineering, 2018, Stanford University, USA)	Magnetic resonance imaging, scalar dispersion, heat transfer, data-driven turbulence modeling, particle-laden flows, radiation
BROUZET, Dr. Davy 10/2020–present	(Ph.D. Computational Fluid Dynamics, 2020, The University of Melbourne)	Turbulent combustion aeroacoustics and combustion noise, direct numerical simulations and large-eddy simulations of reacting flows
DI RENZO, Dr. Mario 01/2019–12/2019	(Ph.D. Mechanical Engineering, 2018, Politecnico di Bari, Italy)	Compressible flows, particle-laden turbulent flows, reacting flows, and flow control using electric fields
DOUASBIN, Dr. Quentin 01/2019–08/2020	(Ph.D. Numerical Combustion, 2018, Institut de Mécanique des Fluides de Toulouse, France)	Thermoacoustics, supercritical combustion, acoustic-field analysis and reconstruction
FU, Dr. Lin 01/2018–present	(Ph.D. Fluid Mechanics, 2017, Technical University of Munich, Germany)	High-order TENO schemes, large-eddy simulations, multi-phase flows, and compressible turbulent boundary layers

HUANG, Dr. Zhu 03/2018–08/2020	(Ph.D. School of Energy and Power Engineering, 2015, Xi'an Jiaotong University, China)	Nonlinear stability of shear flows, and flow control and spectral methods in CFD
JEUN, Dr. Jinah 01/2019–present	(Ph.D. Aerospace Engineering and Mechanics, 2018, University of Minnesota, USA)	Computational aeroacoustics, stability, and reduced-order modeling
JOFRE, Dr. Lluís 02/2015–12/2019	(Ph.D. Mechanical Engineering, 2014, Technical University of Catalonia, Spain)	Numerical methods for computational fluid dynamics and multi-phase flows
JOHNSON, Dr. Perry 09/2017–06/2020	(Ph.D. Mechanical Engineering, 2017, Johns Hopkins University, USA)	Small-scale and wall turbulence, particle-laden flows
KARP, Dr. Michael 09/2017–08/2020	(Ph.D. Aerospace Engineering, 2017, Technion Israel Institute of Technology, Israel)	Aerodynamics, fluid mechanics, flow instabilities, transition to turbulence, flow control and flight mechanics
LOZANO-DURÁN, Dr. Adrián 01/2016–12/2020	(Ph.D. Aerospace Engineering, 2015, Universidad Politécnica de Madrid, Spain)	Numerical studies of wall-bounded turbulence, and wall-models for large eddy simulation
MIRJALILI, Dr. Shahab 07/2019–present	(Ph.D. Mechanical Engineering, 2019, Stanford University, USA)	Numerical methods and physics of two-phase flows, electrokinetics in plasma regimes, and machine learning
PAUL, Dr. Immanuel 05/2018–02/2020	(Ph.D. Aeronautics, 2017, Imperial College London, United Kingdom)	Fractal-grid-generated turbulence, fine-scale structure of fluid and scalar turbulence, numerical heat transfer

SHAO, Dr. Changxiao 12/2018–12/2020	(Ph.D. Energy Engineering, 2017, Zhejiang University, China)	Large eddy simulation of spray combustion and analysis of combustion noise
WANG, Dr. Jonathan 10/2020–present	(Ph.D. Theoretical and Applied Mechanics, 2020, University of Illinois at Urbana-Champaign)	Laser-induced breakdown, chemically reacting flows, compressible flows, numerical simulations
Research Associates		
HACK, Dr. Philipp 01/2017–12/2020	(Ph.D. Thermofluids, 2014, Imperial College London, United Kingdom)	Computational and theoretical studies of transitional flows, stability analysis, optimization, and machine learning
MAEDA, Dr. Kazuki 08/2019–present	(Ph.D Mechanical Engineering, 2018, California Institute of Technology, USA)	Physics, modeling, and simulation of high-speed multiphase flows, and their engineering applications
Senior Consultant		
BOSE, Dr. Sanjeeb	Adjunct Professor at Stanford Institute of Computational and Mathematical Engineering, and CTO at Cascade Technologies Inc., USA	Wall models for LES, numerical methods, and high-performance computing
Senior Research Engineer		
URZAY, Dr. Javier 04/2011–present	(Ph.D. Aerospace Engineering, 2010, University of California San Diego, USA)	Hypersonic aerothermodynamics, supersonic combustion, and chemical rocket propulsion