FACULTY CURRICULUM VITAE

Name: Jean Al Am
Rank: Assistant Professor - School of Aviation

Personal Information

Nationality:	French
AU Joining Date:	August 2025
E-Mail Address:	j.alam@au.edu.kw

Professional Information

Education:	• PhD in fluid dynamics at Ecole Centrale de Lyon and Safran, France. 2019 – 2022: Broadband noise prediction of future generation aero-engines using high fidelity numerical simulations. • Masters in Aeronautics and Energetics at Ecole CentraleSupélec, Université Paris-Saclay, France. 2018-2019 (18/20, rank 1). • Mechanical engineering at the Lebanese University, Faculty of Engineering, Lebanon. 2014-2019 (17/20).
Specialization:	Fluid dynamics
Current Academic Position:	Assistant Professor - School of Aviation
Current Professional Positions:	Assistant Professor - School of Aviation
Previous Administrative Position Held:	NA
Previous Academic Positions Held:	• Aero-acoustic engineer at Safran Aircraft Engines, France. May 2023 – August 2025. • Post-doctoral engineer at LMFA (Ecole Centrale de Lyon), France. Nov 2022 – May 2023. Advanced numerical analysis of a 360° Ultra High Bypass ratio fan/OGV stage.

Fellowships And Honors:	• Top 5 classification at the European Turbomachinery conference 2021. • IDEX Scholarship at CentraleSupélec - University Paris-Saclay.
Teaching Experience:	• Lecturer at Ecole Centrale de Lyon Dec 2019 – Feb 2023 (180hrs): Fluid dynamics, Computational fluid dynamics, compressible flows, Turbomachinery, Advanced numerical methods • Lecturer at the Lebanese University, faculty of engineering. 2022-2023: Computational fluids dynamics (remotely).
Industrial And Technical Experience:	• Aero-acoustic engineer at Safran Aircraft Engines, France. May 2023 – August 2025. • Master's internship at CentraleSupélec and Airliquide, France for 6 months: Large eddy simulations of a high-pressure and high-temperature swirled oxy-flame of an industrial process.
Research Interest:	• Computational Fluid Dynamics (CFD) • Aerodynamics noise predictions (Fan or propellers, compressor and turbine blades). • RANS and Large eddy simulations (LES, WMLES, WRLES). • Turbulence models • Wind-tunnel Experimental Analysis. • Propulsion systems. • Combustion and heat transfer. • Aircraft Maintenance Analysis
Research Grants:	• PRACE project (LESFOS, id.2021240101) award of 30 million CPUh to perform a first of its kind high fidelity computation on a full fan/OGV stage of future generation aeroengines (selected between 43 laureate projects in Europe). https://prace-ri.eu/hpc-access/project-access/project-access-awarded-projects/projectsawarded-under-prace-project-access-call-23/#Engineering • Four grants for a total of 20 millions CPUh from CCRT France.
Research and Publications including Journal and Books:	• J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. Direct noise predictions of an UHBR turbofan stage: periodic sector vs full annulus large-eddy simulations. AIAA Journal, 2024, p. 1-15. https://doi.org/10.2514/1.J063596. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. Aeroacoustic analysis of the tip-leakage flow of an ultrahigh bypass ratio fan stage. Physics of Fluids, 35, 047104, 2023. https://doi.org/10.1063/5.0146143. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. On the effects of a separation bubble on fan noise. Journal of Sound and Vibration, 537, 2022. https://doi.org/10.1016/j.jsv.2022.117180. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. A parametric study on the LES numerical setup to investigate fan/OGV broadband noise. International Journal of Turbomachinery, Propulsion and Power, 6(2) :12, 2021. https://doi.org/10.3390/ijtpp6020012.

	• Article published in the "Tribune de Lyon" journal, December 2022. Une simulation lyonnaise inédite pour réduire le bruit des moteurs d'avions. https://tribunedelyon.fr/sciences-innovation/une-simulation-lyonnaise-inedite-pour reduire-le-bruit-des-moteurs-davions/.
Paper Presentations at Professional Conferences:	• J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. Direct noise predictions of fan broadband noise using LES and analytical models. 28th AIAA/CEAS Aeroacoustics Conference, 2022. https://doi.org/10.2514/6.2022-2882. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. Effet du débit sur le bruit propre d'un étage soufflante/redresseur en régime d'approche, Congrès Français de l'Acoustique, 2022. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. Fan/OGV broadband noise predictions using LES. EuroHPC Summit Week 2022, Paris, France. • J. Al-Am, V. Clair, A. Giauque, J. Boudet, and F. Gea-Aguilera. A parametric study on the LES numerical setup to investigate fan/OGV broadband noise. 14th European Conference on Turbomachinery Fluid dynamics & Thermodynamics Conference, 2021.
College Service including committee Membership:	• Membership at the laboratory consul of LMFA (Laboratoire de Mécanique de Fluide et d'acoustique) at Ecole Centrale de Lyon. January 2021 till Decembre 2022.
National Service:	NA
College Committees:	NA