Asteris Apostolidis **PhD | Research & Innovation | Aviation & Aerospace | AI & Simulation**

My professional interests lie at the interface of technology, aviation, strategy, and sustainability. I have a broad technical, managerial, and research experience, having worked for airlines, academic institutes, and aerospace manufacturers. I have dealt with the technical and strategic problematics of the design, simulation, operation, and maintenance of aircraft systems and simulation of aviation processes, having led numerous projects and research initiatives. I lead the Working Group on Diagnostics and Prognostics of the Independent Data Consortium for Aviation (IDCA) and I serve on the Rulemaking Committee on Trustworthy AI for the European Union Aviation Safety Agency (EASA), next to several other appointments on Technical Advisory Boards and international Working Groups.

Professional Experience

05/2023 – Ongoing **Senior Lead, Technical Innovation & Emerging Technologies**

KLM Royal Dutch Airlines **Amsterdam, The Netherlands**

My role at the KLM BlueLabs requires experimentation with new technologies, in order to accelerate KLM's technical innovation. I lead the Fleet Lab, where we aim to innovate in Fleet Operations, Availability and Development with the use of disruptive digital technologies. In addition, I lead the Emerging Technologies Lab, where we aim to explore the latest technologies and work in co-creation with KLM's business units towards new services and processes. We bring in outside expertise through collaborations with external partners and universities. My main focal areas are the following:

- *Simulations methods and Digital Twins for airline, airport, and maintenance operations*
- *Data exchange applications in aviation MRO, airline and multimodal networks*
- *Applications of AI in airline processes, systems, and assets*
- *Autonomous Ground & Airport Operations*
- *Member of KLM's AI Board*

05/2023 – ongoing **Senior Research Associate**
06/2021 – 05/2023 **Associate Professor of Aviation Engineering**
Lead, Maintenance Lab

Amsterdam University of Applied Sciences – Faculteit Techniek **Amsterdam, The Netherlands**

I led several industrial research activities within AUAS, while being responsible for the links between the projects, the research team and the university's industrial network:

- *I led various research activities for the R&D Mobility Sectors Scheme Bright Sky (total budget 24M€, AUAS budget 1,8M€), which I co-developed during the proposal phase.*
- *I led various technology- and date-related research activities with partners such as Air France-KLM, the Royal Dutch Air Force, Tata Steel, and MTU Aero Engines, among others.*
- *I led the activities of the AUAS Maintenance Lab, working on technologies such as data-driven maintenance, aviation process optimisation and digital twin development.*
- *I actively contribute to the strategic roadmap of the Faculty of Technology.*

My main scientific areas of interest include the following:

Artificial Intelligence in Aeronautical Systems, Emerging Technologies in Aviation, Engineering Simulation, Strategy and Operations in Aviation, Clean Air Mobility, Aircraft and Engine Design

11/2024 – ongoing **Visiting Lecturer – Digital Innovation for Asset Lifecycle Management & Fleet Operations**

Cranfield University – School of Aerospace, Transport and Manufacturing **Bedford, UK**

I deliver yearly lectures, workshops and case studies on how advanced digital technologies like predictive analytics, digital twins, and condition-monitoring can be integrated into asset lifecycle management and fleet operations strategy for gas turbine systems. I guide participants -typically operations and maintenance engineers- through the application of these tools in real-world settings, demonstrating how digital innovation can optimize availability, reliability, cost-efficiency and operational performance.

06/2016 – 05/2021 **Co-founder, Special Advisor**

GIVE | Green Innovation & Vehicle Engineering **Athens, Greece**

I co-founded GIVE, an engineering consultancy Research & Development firm. GIVE specialises in land and air battery electric vehicle (BEV) and fuel cell electric vehicle (FCEV) development, technical innovation and engineering analytics, including:

- *Product development for the automotive and aerospace industry*
- *Engineering system analysis & optimisation*
- *System development for electric vehicles*

The clientele of GIVE includes automotive industries, wind turbine OEMs, aeronautical manufacturers, and motorsport teams. GIVE also participates in various academic research projects, employing engineering students and contributing to their graduation theses.

02/2019 – 05/2021 **Technology Innovation Manager**

Air France KLM Group **Amsterdam, The Netherlands & Paris, France**

In this role, I was member of the air France KLM Group's CIO Office. I led various innovation initiatives and I worked with technology providers and academia, to form the future technological capabilities of the Group. My focal areas were:

- *Artificial Intelligence in Aviation & Aerospace*
- *Emerging Technologies & Tech Trends*
- *Digital Platform Strategy & Enablers*
- *Sustainability in Aviation & IT*

10/2017 – 02/2019 **Senior Engineer, Aircraft Engine Analytics**

Air France Industries KLM Engineering & Maintenance **Amsterdam, The Netherlands**

I launched the activity of data-driven predictive analytics for KLM Engine Services. I built the original business case and organised the related activities. My focal areas were:

- *Analysis of the internal maintenance processes and identification of bottlenecks*
- *Development of the general roadmap on future engine analytics capabilities*
- *Predictive maintenance modelling, development, and team guidance*

04/2015 – 07/2017 **Aerothermal Engineer**

Safran Aircraft Engines, Airbus & Altran Technologies **Toulouse, France**

I led and executed numerous Research & Development modelling and simulation projects for various major aerospace manufacturers. In more details, I performed:

- *Preliminary and detailed design of aerothermal features for safety-critical applications: Aerothermal model development for the A320neo engine (CFMI LEAP-1A, P&W PG1100G)*
- *Model-based simulation method development for various Airbus programmes: Gas turbine performance analysis for the A320neo/LEAP-1A & A380/Rolls Royce T900, Future Nacelle Anti-Icing system modelling and development*
- *Validation, calibration, and verification of simulation codes for certification campaigns: Environmental Control System modelling for special aircraft operations.*

11/2010 – 05/2014 **Doctoral Researcher**

Cranfield University – School of Aerospace, Transport and Manufacturing **Bedford, UK**

During my doctoral studies, I developed numerous technical tools and functionalities, I led and managed a major university project, and I provided student supervision and mentoring:

- *I oversaw the development and coordination of the WebEngine, a web-based engineering simulation tool, aimed to be used by remote students and external users.*
- *I have developed various turbine cooling prediction models and a heat transfer simulation platform for aircraft part life prediction and thermodynamic cycle modelling.*

04/2013 – 08/2013 **Aerodynamicist** [Placement]

Aircraft Research Association **Bedford, UK**

In parallel with my doctoral studies, I worked in a fighter jet aerodynamics project. I analysed supersonic wind tunnel data, using innovative image-processing methods. The results of the analysis were used for the optimisation of the aircraft's design.

10/2009 – 09/2010 **Design Engineer** [Placement]

Rolls-Royce plc **Derby, UK**

I performed my MSc Thesis research during a placement with Rolls-Royce University Technology Centre in Performance Engineering. I developed various computational models of the high-pressure axial compressor of the Trent 900 engine.

Expert Group Memberships

2024 – Ongoing **Member, Rulemaking Committee, Artificial Intelligence Trustworthiness (RMT.0742)**

European Union Aviation Safety Agency (EASA)

I am a core committee member which, under the guidance of EASA, develops the regulations around the use of AI-based systems in safety-critical applications in aviation.

2023 – Ongoing **Chair, Aircraft Operational Data Working Group**

Independent Data Consortium for Aviation

I lead the activities for the working group that develops the use case for Prognostics and Diagnostics. The team consists of numerous industry leaders, aiming to the development of a framework for the landscape in data exchange for aviation Diagnostics and Prognostics.

2024 – Ongoing **Independent Expert in New and Emerging Technologies**

European Union Aviation Safety Agency (EASA)

I provide support to EASA for the following tasks:

- *Provide technical expertise in the area of New and Emerging technologies*
- *Support the evaluation of applications and monitoring of their implementation*
- *Provide support to and participate in various technical meetings and working groups*
- *Provide support to the European Central Question Bank (ECQB) around the development of questions for pilots' theoretical knowledge examinations*

2020 – Ongoing **External Expert**

European Commission

The European Union Institutions appoint external experts to assist in the evaluation of grant applications, projects and tenders, and to provide opinions and advice in specific cases.

- *Evaluation of proposals, prize applications and tenders*
- *Monitoring of actions, grant agreements, public procurement contracts*
- *Preparation, implementation and evaluation of EU programmes and design of policies*

2019 – 2023 **Co-chair, Data Management (SG2) & Machine Learning Design (SG3) Committees**

SAE International G-34 & **EUROCAE WG-114** Working Groups
The Joint International Committee SAE G-34 / EUROCAE WG-114 focuses on implementation and certification of AI technologies for the safe operation of aerospace systems and vehicles.

2019 – 2022 **Member of the Technical Advisory Board**

Horizon Europe HECARRUS project
Member of the Technical Advisory Board for the EU Clean Sky 2 R&I Programme HECARRUS (Hybrid Electric Small Commuter Aircraft Conceptual Design).

2020 – 2022 **Expert**

Solar Impulse Foundation
The Solar Impulse Experts community is a pool of industry-leading assessors, who certify that submitted solutions satisfy several sustainability, business and feasibility criteria.

2018 – 2022 **Member of the User Committee**

CIMPLO project
Member of the User Committee for the NWO Applied and Engineering Sciences Research Programme CIMPLO (Cross-Industry Predictive Maintenance Optimization Platform).

2011 – Ongoing **Member**

American Institute of Aeronautics and Astronautics
Full member of AIAA, participating in various professional and educational activities.

Academic Research Programmes

11/2021 – 11/2023 **Project Leader for Amsterdam University of Applies Sciences**

BrightSky (R&D Mobility Sectors Scheme) **Schiphol, Netherlands**
Amsterdam Airport Schiphol is an innovation hub for aviation, due to the high concentration of aviation-related activities. The aim of BrightSky (24M €) is to maintain and strengthen the innovative strength of the Dutch aviation sector by means of technical innovations in Maintenance, Repair and Overhaul, Aircraft Availability and Airport Security.

11/2017 – 05/2022 **Project Leader for KLM**

CIMPLO (NWO Smart Industry 2016) **Leiden, Netherlands**
The CIMPLO project aims at developing a cross-industry predictive maintenance optimisation platform that achieves business advantages in terms of safety, time and finance, The project combined predictive maintenance with dynamic multi-objective scheduling.

10/2016 – 03/2019 **Project Advisor**

Data Mining in MRO (NWO / SIA RAAK MKB) **Amsterdam, Netherlands**
This RAAK MKB project aims to help MRO SMEs in the aviation industry to predict their maintenance requirements in terms of costs and time.

Education

11/2010 – 05/2014 **PhD in Turbine Cooling and Heat Transfer Modelling for Gas Turbine Performance Simulation**

Cranfield University – School of Aerospace, Transport and Manufacturing **Bedford, UK**
Academic supervisors: Prof Panos Laskaridis, Prof Suresh Sampath, Prof Pericles Pilidis

10/2009 – 09/2010 **MSc in Thermal Power – Aerospace Propulsion [Cum Laude]**

Cranfield University – School of Engineering **Bedford, UK**
Academic supervisors: Dr Pavlos K Zachos, Prof Vassilios Pachidis
Industrial supervisors: Mr Stephen Brown, Mr Arthur Rowe, Rolls-Royce plc.

10/2003 – 09/2009 **Diploma in Mechanical Engineering – Energy & Aeronautics option**

Aristotle University of Thessaloniki – School of Engineering **Thessaloniki, Greece**
Academic supervisors: Prof Anestis I Kalfas, Prof Kyros Yakinthos

Languages

English	French	Dutch	Greek
Full professional proficiency	Full professional proficiency	Intermediate level	Native language

Other Activities & Distinctions

2022 Academic Supervisor of Stijn Donckers, awarded for the best thesis (General Category) by The Dutch Air- and Aerospace Foundation (NLF).

2020 – Ongoing Guest Columnist for AIAA Aerospace America [1, 2, 3] and the Solar Impulse Foundation on topics related to sustainable aviation and future aircraft technologies.

2019 Awarded for an Outstanding Contribution in Reviewing by Elsevier, in recognition of my contribution to the quality of the peer-reviewed scientific journal Energy.

2016 – Ongoing Reviewer for journals and conference proceedings:

Energy (Elsevier)
Aerospace (MDPI)
Journal of Environmental Management (Elsevier)
Journal of Aerospace (SAE International)
International Journal of Sustainable Aviation (Inderscience)
The Prognostics and Health Management Society (PHM Society)
Turbo Expo - Turbomachinery Technical Conference (ASME)

2013 Selected and sponsored by the German Aerospace Center (DLR) to attend their programme in Direct Numerical Simulations and Large Eddy Simulations in Göttingen, Germany.

2010 Full scholarship (tuition fees and living costs) from Cranfield University, to conduct my doctoral research, for the total duration of the programme (2010-2014).

2009 Selected and supported by Rolls-Royce plc. to conduct my MSc research under the programme Rolls-Royce University Technology Centre in Performance Engineering at Cranfield University.

Invited Talks

2025

36. Invited Speaker, *"Innovation Beyond AI: What is Next",* EUROCONTROL Innovation MeetUp, EUROCONTROL Innovation Hub, Paris, France

35. Panel Speaker, *"Beyond the hype - realities and challenges in quantum computing and AI applications in the real world",* quantum.tech 2025, Rotterdam, the Netherlands

34. Invited Speaker & Panellist, *"The journey to Autonomous Operations: Building the right foundations",* Future Travel Experience EMEA Conference 2025, Dublin, Ireland

33. Keynote Speaker, *"Revolutionising aerospace with trustworthy AI",* 11th China Aviation New Technology Forum 2025, Guangzhou, China

32. Invited Speaker, *"The pursue for operational efficiency: A long-term airline vision",* Machining Innovations Conference for Aerospace Industry (MIC 2025), Hannover, Germany

2024

31. Invited Speaker, *"Digital Innovation for Asset Lifecycle Management and Fleet Operations",* Cranfield University, Bedford, UK

30. Invited Speaker, *"Are Digital Twins a Good Idea for Airlines?",* Partner Meetup, Kickstart AI, Amsterdam, The Netherlands

29. Panel Speaker, *"Data synergy: Can we unlock aviation's potential through collaboration?",* World Aviation Festival, Amsterdam, The Netherlands

28. Panel Speaker, *"How can AI and data analytics be harnessed to mitigate contrails and drive sustainability in aviation?",* World Aviation Festival, Amsterdam, The Netherlands

27. Keynote Speaker, *"Digital Twins for Predictive Airline and Maintenance Operations",* ISATECH 2024, Ho Chi Minh City, Vietnam

26. Invited Speaker, *"Towards Net-Zero Aviation with AI",* Georgia Institute of Technology, Atlanta, USA

25. Invited Speaker, *"Digital Twins for airline operations",* Development Center for Maintenance of Composites DCMC, NLR Royal Netherlands Aerospace Centre, Amsterdam, The Netherlands

24. Invited Speaker, *"Industry-wide Data Sharing: Eliminating the Risk for Common Benefits",* Aerospace Tech Week, Munich, Germany

2023

23. Invited Speaker, "*Data Exchange Systems for Aircraft Operations and Maintenance*", Amsterdam Data Exchange (AMdEX), The Netherlands

22. Invited Speaker, *"Applications of AI in Decision Support for Aviation"*, Word Summit AI, Amsterdam, The Netherlands

21. Invited Speaker, *"Trustworthy AI for Safety-critical Applications in Aviation and beyond"*, Ai Tech Summit, Skopje, North Macedonia

20. Invited Speaker, *"Towards Sustainable, Data-driven Aircraft Maintenance",* Mälardalen University, Sweden

2022

19. Invited Speaker, "*Electric flights between the ABC islands*", Dutch Caribbean Cooperation of Airports, Aruba

18. Invited Speaker, "*Condition-Based Maintenance considerations for safety-critical gas turbine applications*", Aristotle University of Thessaloniki, Greece

17. Invited Speaker, *"Artificial Intelligence for Predictive Maintenance in Gas Turbines*", ISATECH 2022 conference, Belgrade, Serbia

16. Round Table, "*Student Preparedness for Academic & Industry Careers*", ASME Turbo Expo 2022, Rotterdam, The Netherlands

15. Invited Lecture, "*Digital transformation in the aviation maintenance industry: Technology opportunities and human challenges*", World Class Maintenance, The Netherlands

14. Expert Workshop, "*H-factor: Will European R&D catalyse the clean hydrogen era?*", Science|Business, Belgium

2021

13. Invited Lecture, "*AI for Aviation MRO*", Responsible AI Series, IET/The Alan Turing Institute, UK

12. Web Lecture, *"AI for Sustainable Aviation MRO*", AI for Aviation Sustainability, Air France-KLM

11. Guest Lecturer, "*AI for MRO Scheduling*", Diagnostics for Industrial Systems and Processes, Mälardalen University, Sweden

2020

10. Discussion Panel, "*How efficient is your airline? Increasing operations with data analytics*", 1st Aviation Sustainability Conference, Dubai

9. Guest Lecturer, Gas Turbine Minor, Hogeschool Inholland / HvA, The Netherlands

8. Keynote Speaker, "*The Future of Aviation Sustainability: Where we currently stand and possible ways forward*", ISEAS / ISATECH 2020 conferences, Kiev, Ukraine

7. Round table, "*Future of Aviation Sustainability*", Dubai Airshow, Dubai

6. Guest Lecturer, "*KLM x VU: Supporting decision making*", Business Analytics MSc, Vrije Universiteit Amsterdam, The Netherlands

2019

5. Guest Lecturer, Gas Turbine Minor, Hogeschool Inholland / HvA, The Netherlands

4. Invited speaker, "*Build your own Aircraft Engine Analytics*", MRO Innovation Fair 2019, KLM E&M, The Netherlands

3. Discussion Panel, "*Gas Turbine Diagnostics*", ISATECH 2019 conference, The Netherlands

2. Round table, "*Innovation in Aviation MRO*", Dutch Aviation Hub for MRO, The Netherlands

1. Guest Lecturer, "*Gas Turbine Data-driven Diagnostics*", Mälardalen University, Sweden

PhD External Examiner

2025

4. Wilhelm Söderkvist Vermelin, "*Data-Driven Remaining Useful Life Prediction of Energy-Intensive Industrial Assets",* PhD Licentiate thesis, Mälardalen University, Sweden

2023

3. Simon Mählkvist, "*Cost-Conscious Analytics and Decision Support for Industrial Batch Processes",* PhD Licentiate thesis, Mälardalen University, Sweden

2. Mikael Stenfelt, "*On model based aero engine diagnostics"*, PhD Licentiate thesis, Mälardalen University, Sweden

2022 **1.** Marios Kefalas, *"Data-driven Predictive Maintenance and Time-Series Applications"*, PhD Thesis, Leiden University, The Netherlands

Student Supervision

Company Supervisor

Leiden University	Marios Kefalas	PhD Research
Delft University of Technology	Bruno Lapré, Bas van de Walle, Bastiaan Röell, Stijn van Vuuren	MSc Thesis
University of Amsterdam	Kim Tigchelaar, Antara Chakrabarty, Priyanka Atwani	Msc Thesis
	Manoviraj Singh Shergill, Carlos Dos Santos Pereira Malveiro, Sahil Panse, Wouter van der Wal, Mihkel Talmar, Punith Mishra	JIP / MSc
International Hellenic University	Georgios Iatrou	MSc Thesis
Vrije Universiteit Amsterdam	Osman Azizi	MSc Thesis
	Lisette Bakker, Simon Donker van Heel, Rens Gerrits, Michiel Kempkens, Charissa Kertowidjojo, Saad Anwar, Osman Azizi, Brigitte Boorsma, Berend Markhorst, Alexander Mijatovich	BSc Project
Amsterdam University of Applied Sciences	Thom van Poortvliet	BSc Project

Academic Supervisor

Cranfield University	Syed Atif Shafi, Tomás Baudin Lastra	MSc Thesis
	Jinan Ejaz Khawer	Pre-Masters
Amsterdam University of Applied Sciences	Cengiz Topçuoğlu, Tom Apeldoorn, Onell Izhak, George Ottens, Benjamin Sarkodie, Dave Peijnenburg, Stijn Donckers, Hafid Herbrands, Floor Franken	BSc Project

Peer-Reviewed Publications [Google scholar]

2024

17. Apostolidis, A.; Le Dantec, S.; Stamoulis, K.P. *"Towards Trustworthy Data-driven Gas Turbine Prognostics"*. ICAS Proceedings, 2024. https://www.icas.org/ICAS_ARCHIVE/ICAS2024/data/papers/ICAS2024_0793_paper.pdf

16. Apostolidis, A.; Donckers, S.; Peijnenburg, D.; Stamoulis, K.P. *"Electric Aircraft Operations: An Interisland Mobility Case Study*. Aerospace 2024, 11, 170. https://doi.org/10.3390/aerospace11030170

15. Donckers, S., Stamoulis, K.P., Apostolidis, A., "*Battery-Electric Aircraft Flight Operations for Interisland Mobility*", J. Phys.: Conf. Ser. 2716 012009 https://doi.org/10.1088/1742-6596/2716/1/012009

14. Volker, A., Stamoulis, K.P., Schoemaker, C., Apostolidis, A., van Tongeren, D., Poppe, R., Bekkema, B., Martina, Q., *"A Novel, Non-Contact NDT Scanner Case Study: Thickness Measurement, Debonding and Defects Detection in Metallic and Composite Parts",* J. Phys.: Conf. Ser. 2692 012024 https://doi.org/10.1088/1742-6596/2692/1/012024

2022

13. Apostolidis, A., Bouriquet, N., Stamoulis, K.P., *"AI-Based Exhaust Gas Temperature Prediction for Trustworthy Safety-Critical Applications",* Aerospace 9 (11), 722. https://doi.org/10.3390/aerospace9110722

12. Kefalas, M., van Stein, B., Baratchi, M., Apostolidis, A., Bäck, T., "*An End-to-End Pipeline for Uncertainty Quantification and Remaining Useful Life Estimation: An Application on Aircraft Engines*", PHM Society European Conference, 7(1), 245–260. https://doi.org/10.36001/phme.2022.v7i1.3317

11. Protopapadakis, G., Apostolidis, A., Kalfas, A.I., "Explainable and Interpretable AI-assisted Remaining Useful Life Estimation for Aeroengines", Proceedings of ASME Turbo Expo 2022, GT2022-80777, Rotterdam, The Netherlands. https://doi.org/10.1115/GT2022-80777

10. Kefalas, M., de Santiago Rojo Jr., J., Apostolidis, A., van den Herik, D., van Stein, B., Bäck, T., "*Explainable Artificial Intelligence for Exhaust Gas Temperature of Turbofan Engines*", AIAA Journal of Aerospace Information Systems, 2022 19:6, 447-454. https://doi.org/10.2514/1.I011058

2021

9. Kefalas, M., Baratchi, M., Apostolidis. A., van den Herik, D., and Bäck, T., *"Automated Machine Learning for Remaining Useful Life Estimation of Aircraft Engines"*, Proceedings of the 2021 IEEE International Conference on Prognostics and Health Management (ICPHM 2021), Detroit, Michigan, USA. https://doi.org/10.1109/ICPHM51084.2021.9486549

8. Apostolidis, A., Stamoulis, K.P., "A Health Monitoring Modelling Case Study: Humidity Effects on Engine Deterioration Prediction", Proceedings of the 6th International Conference of Engineering Against Failure 2021 (ICEAF-VI 2021), MATEC Web Conf. Volume 349, Virtual Event. https://doi.org/10.1051/matecconf/202134903011

7. Apostolidis, A., Stamoulis, K.P., *"An AI-based Digital Twin Case Study in the MRO Sector"* Proceedings of the 1st International Conference on Aviation Future: Challenge and Solution (AFCS 2021), Ho Chi Minh City, Vietnam, Transportation Procedia, 56, 55-62. https://doi.org/10.1016/j.trpro.2021.09.007

2020

6. Apostolidis, A., Pelt, M., Stamoulis, K.P., *"Aviation Data Analytics in MRO Operations: Prospects and Pitfalls",* Proceedings of IEEE RAMS 2020, Palm Springs, CA, USA. https://doi.org/10.1109/RAMS48030.2020.9153694

2019

5. Van Nguyen, D., Kefalas, M., Limmer, S., Apostolidis, A., Yang, K., Olhofer, M., Bäck, T., *"A review: Research and Application of Prognostics and Health Management in Automotive and Aerospace Industries"*, International Journal of Prognostics and Health Management, vol. 10 (2) 023. https://doi.org/10.36001/ijphm.2019.v10i2.2730

4. Pelt, M., Stamoulis, K.P., Apostolidis, A., *"Data analytics case studies in the maintenance, repair and overhaul (MRO) industry"*, Proceedings of EASN 2019, Athens, Greece. https://doi.org/10.1051/matecconf/201930404005

3. Kefalas, M., Limmer, S., Apostolidis, A., Olhofer, M., Emmerich, M., Bäck, T., *"A Tabu Search-based Memetic Algorithm for the Flexible Job Shop Scheduling Problem"*, Proceedings of GECCO 2019, Prague, Czech Republic. https://doi.org/10.1145/3319619.3326817

2013

2. Apostolidis, A., Laskaridis, P. and Pilidis, P., *"A High Resolution Turbine Cooling Prediction Method for Performance and Mechanical Integrity Calculations"*, Proceedings of ISABE 2013-10212 (Published by AIAA), Busan, Korea.

1. Apostolidis, A., Sampath, S., Laskaridis, P. and Singh, R., *"WebEngine - A Web-Based Gas Turbine Performance Simulation Tool"*, Proceedings of ASME Turbo Expo 2013, GT2013-95296, San Antonio, Texas, USA. https://doi.org/10.1115/GT2013-95296

PhD Thesis

2015

Apostolidis, A., *"Turbine cooling and heat transfer modelling for gas turbine performance simulation*", PhD Thesis, Cranfield University. https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.650163

Technical Report co-authoring and co-editing

2019

1. Pelt, M., Apostolidis, A., de Boer, R.J., Borst, M., Broodbakker, J., Patron, R.F., Helwani, L., Jansen, R., Stamoulis, K.P., "*Data Mining in MRO"*, published by Amsterdam University of Applied Sciences and funded by an RAAK MKB grant of the Dutch Ministry of Education. [URL]

Conference Presentations

2023

3. Apostolidis, A., Franken, F., Stamoulis, K.P., "Aero Engine Derate: A Fleet Comparative Study for Improved Flight and Maintenance Operations", 13th EASN International Conference, European Aeronautics Science Network, Salerno, Italy. https://easnconference.eu/sites/default/files/13th_EASN_International_Conference-Preliminary_Agenda-v2.pdf

2022

2. Apostolidis, A., Stamoulis, K.P., "*Condition-based Maintenance Considerations for Safety-critical Decision Support in Aircraft Engines*", 1st International Conference for CBM in Aerospace, TU Delft, The Netherlands. https://cbmacademy.eu/wp-content/uploads/2022/05/ICCBM2022_Program_vm17.pdf

2021

1. Protopapadakis, G., Apostolidis, A., Kalfas, A.I., "*Remaining Useful Life Estimation Using Realistic Data for Predictive Maintenance of Gas Turbine Engines*", ASME AMRGT Advanced Manufacturing & Repair for Gas Turbines, Virtual Event. https://event.asme.org/AMRGT/Program/Accepted-Presentation-Abstracts

Conference Editorial Note

2019

1. Stamoulis, K.P., Papanikou, M., Apostolidis, A., Plioutsias, A., Karakoc, H., Editorial, Proceedings of the 2nd International Symposium on Aircraft Technology, MRO and Operations (ISATECH) and the 4th International Cross-industry Safety Conference (ICSC), EDP Sciences. https://www.matec-conferences.org/articles/matecconf/pdf/2020/10/matecconf_ICSC-ISATECH2019_About.pdf

Guest Opinion Articles for AIAA Aerospace America

2023

3. Apostolidis, A., *"B-21 unveiling Thoughts about the design, and why civilian designers are intrigued by blended-wing-bodies too"*, AIAA Aerospace America, 61 (1), 40-41, https://aerospaceamerica.aiaa.org/features/b-21-unveiling/

2021

2. Apostolidis, A., "*Decarbonizing By 2050: Optimists pessimists and realists"*, AIAA Aerospace America, 59 (3). https://aerospaceamerica.aiaa.org/departments/decarbonizing-by-2050-optimists-pessimists-and-realists/

2020

1. Apostolidis, A., "*Don't sideline environmental sustainability*", AIAA Aerospace America, 58 (6). https://aerospaceamerica.aiaa.org/departments/dont-sideline-environmental-sustainability/

Conference and Seminar Organiser / Committee Member

2023

3. Scientific Committee, EUROSIM 2023, Dutch Benelux Simulation Society, 03-05 July 2023, Amsterdam, The Netherlands.

2. Technical Programme Committee (TPC), 62nd ESReDA Seminar on "*Managing the unexpected: designing systems to embrace disorder for increasing asset reliability*", 12-13 April 2023, University of Twente, The Netherlands.

2019

1. Co-chair and organiser, 2nd International Symposium on Aircraft Technology, Maintenance, Repair & Operations (ISATECH), 09-11 October 2019, Amsterdam, The Netherlands.