Maxim Tyan PhD

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Date of birth: June 7, 1988
Nationality: Uzbekistan

Education

Konkuk University Seoul, Korea
MSc-PhD, Department of Aerospace Information Engineering *2010-2015*

Tashkent State Technical University Tashkent, Uzbekistan
BSc, Aerospace Engineering *2005-2009*

Professional Experience

Research Professor *2017-present*
Konkuk University, Aerospace Design Airworthiness Institute *Seoul, Korea*

Senior Researcher 2015-2017
Konkuk University, Aerospace Design Airworthiness Institute *Seoul, Korea*

Manufacturing Engineer 2007-2010
Engineering Center "Muhandis-Servis" Ltd. *Tashkent, Uzbekistan*

Qualification

Project planning and Management

Initiated multiple international (Canada, Cyprus, Greece, Belgium, Singapore, India) and Korean domestic projects, including projects funded by The Korean Government and European Union

Capable of search for international cooperation, perform business talks and government relationship, develop project charter, and proposal documents.

Can organize an efficient teamwork. Lead both domestic and international projects with up to 30 members.

Teaching

Deliver lectures to undergraduate and graduate students in English and Korean.

Continuous improvement of lecture material providing solution of the most up to date problems and novel algorithms. The main course of aircraft design has more than half of a new material every semester due to rapid development of aircraft technologies.

Aircraft design

Participated in multiple aircraft design projects, including first Korean light aircraft KLA-100 design and development, HALE/MALE type UAV, gliding vehicle, eVTOL UAV powered by battery and/or hydrogen fuel cells, regional electric aircraft, eVTOL aircraft and others. Main expertise is multidisciplinary design optimization and analysis software development.

Flight simulation and control

Developed a flight simulation models for cruising missile, gliding vehicle, and electric UAV, including modeling of complete electric propulsion system. Currently working on development of UAM (air taxi) simulation and traffic management system based on Digital Twin technology.

Software development and integration

Actively participated in development Konkuk University's in-house software for multidisciplinary design and optimization. Early versions written in Fortran and Matlab. Currently leading the project of complete redesign of the software using new architecture in Python.

Have experience in CAD/CAE process automation and integration (CATIA V5, Ansys Fluent, Gridgen, Pointwise, Model Center, PiANo).

Developed several software packages for missile, fixed wing, multicopter, and UAV with tilting propulsion. Software written in C/C++ and integrated to external flight controller based on Ardupilot/PX4 using MAVLink protocols. The developed s/w is actively used for future UAM operational digital twin system.

Lead project for development of data fusion framework for generating flight simulation look-up-tables using various sources of analysis data.

Numerical analysis and Optimization

Have several publications in fields of multidisciplinary design optimization, AI-based optimization, surrogate modeling, adaptive sampling strategies and design under uncertainties.

Skills

Programming	Python, C++, Matlab, VBA
Office	MS Office, LaTeX
Other tools	CATIA (incl. V5 automation), Ansys Fluent, Pointwise, MAVLink,

Lecturing / Teaching Assistance

Graduate Course

2022 Fall Aircraft design project: regional air mobility (RAM) aircraft

2019 Fall	Aircraft design project: hydrogen fuel cell powered eVTOL UAV
2019 Spring	Introduction to optimum design
2016 Fall	Flight simulation
2015 Fall	Aircraft design project: eVTOL UAV design
2015 Spring	Advanced optimization
2013 Fall	Introduction to optimum design

Undergraduate Course

2024 Spring	Aircraft design project: eVTOL UAM (air taxi)
2023 Spring	Aircraft design project: environment friendly electric regional aircraft
2022 Spring	Aircraft design project: digital twin system for urban air mobility (UAM) aircraft
2021 Spring	Aircraft design project: personal air vehicle (PAV)
2016 Spring	Aircraft design project: eVTOL UAV
2012 Fall	Aircraft configuration design: CAD modeling
2012 Spring	Aircraft configuration design: CAD modeling

Language Skills

Russian	Native speaker
English	Full professional proficiency (ILR Level 4)
Korean	Full professional proficiency (ILR Level 4)
Uzbek	Elementary proficiency (ILR Level 1)

Honors and Awards

Best paper award 2016, 2017
Conference of the Korean Society for Aeronautical and Space Sciences

Konkuk academy award 2015
Graduate school of Konkuk University

Brain Korea 21 Scholarship 2010—2013
National research foundation of Korea

Patents

1. Lee, Jae-Woo, Maxim Tyan, and Nhu Van Nguyen. 2017. 강건 최웰 설계 시스템, 묩뭝 묏 컴퓨터 판독 가능한 괰띝매체. 대한민국특허청 10–1783015, filed 23 2017, and issued 22 2017.
2. Maw, Aye Aye, Maxim Tyan, Jae-Woo Lee, and Kwonsu Jeon. n.d. 무인이동체를 위한 인공지능 기반의 경로 재계획 방법 및 장치. 건국대학교 산학협력단 10-2021–0004537, filed January 13, 2021.
3. Nguyen, Le Viet Thang, Maxim Tyan, Jae-Woo Lee, and Kwonsu Jeon. n.d. 비행시험 데이터를 이용한 6 자유도 비행 시뮬레이션 정확도 향상 방법 및 장치 (Method and apparatus for

improving the accuracy of 6-DOF flight simulation using flight test data). 賢信특허법률사무소 2020-I436(KU20L007P).

4. Lee, Jae-Woo, Jae Hyun An, Maxim Tyan, Kwon Doyoun, Jeon Kwon Su, Sizing method and device for initial design of eVTOL UAV powered by a hydrogen fuel cell and battery, issued July 19, 2022, KU22L006P

Journal Publications

SCI/SCIE Journals

1. Nguyen, Nhu-Van, Maxim Tyan, Jae-Woo Lee, and Yung-Hwan Byun. 2014. "Investigations on Missile Configuration Aerodynamic Characteristics for Design Optimization." Transactions of the Japan Society for Aeronautical and Space Sciences 57 (4): 210–18.
2. Tyan, Maxim, Nhu Van Nguyen, and Jae-Woo Lee. 2015. "Improving Variable-Fidelity Modelling by Exploring Global Design Space and Radial Basis Function Networks for Aerofoil Design." Engineering Optimization 47 (7): 885–908. https://doi.org/10.1080/0305215X.2014.941290.
3. Nguyen, Nhu Van, Jae-Woo Lee, Maxim Tyan, and Sangho Kim. 2015. "Repetitively Enhanced Neural Networks Method for Complex Engineering Design Optimisation Problems." The Aeronautical Journal 119 (1220): 1253–70. https://doi.org/10.1017/S0001924000011234.
4. Nguyen, Nhu Van, Jae-Woo Lee, Maxim Tyan, and Daeyeon Lee. 2015. "Possibility-Based Multidisciplinary Optimisation for Electric-Powered Unmanned Aerial Vehicle Design." The Aeronautical Journal 119 (1221): 1397–1414.
5. Nguyen, Nhu Van, Maxim Tyan, and Jae-Woo Lee. 2015. "A Modified Variable Complexity Modeling for Efficient Multidisciplinary Aircraft Conceptual Design." Optimization and Engineering 16 (2): 483–505. https://doi.org/10.1007/s11081-014-9273-7.
6. Lee, Daeyeon, Nhu Van Nguyen, Maxim Tyan, Heun Geun Chun, Sangho Kim, and Jae-Woo Lee. 2016. "Enhanced Multi-Fidelity Model for Flight Simulation Using Global Exploration and the Kriging Method." Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering 231 (4): 606–20. https://doi.org/10.1177/0954410016641441.
7. Nguyen, Nhu Van, Daeyeon Lee, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2016. "Efficient Stall Compliance Prediction Method for Trimmed Very Light Aircraft with High-Lift Devices." Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering 231 (6): 1124–37. https://doi.org/10.1177/0954410016648981.
8. Nguyen, Nhu Van, Maxim Tyan, Sunghyun Jin, and Jae-Woo Lee. 2016. "Adaptive Multifidelity Constraints Method for Efficient Multidisciplinary Missile Design Framework." Journal of Spacecraft and Rockets 53 (1): 184–94. https://doi.org/10.2514/1.A33312.
9. Nguyen, Nhu Van, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2016. "Investigations on Stability and Control Characteristics of a CS-VLA Certified Aircraft Using Wind Tunnel Test Data." Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering 230 (14): 2728–43. https://doi.org/10.1177/0954410016632016.

10. Tyan, Maxim, Nhu Van Nguyen, and Jae-Woo Lee. 2017. "A Tailless UAV Multidisciplinary Design Optimization Using Global Variable Fidelity Modeling." International Journal of Aeronautical and Space Sciences 18 (4): 662–74. http://dx.doi.org/10.5139/IJASS.2017.18.4.662.

11. Tyan, Maxim, Nhu Van Nguyen, Sangho Kim, and Jae-Woo Lee. 2017a. "Database Adaptive Fuzzy Membership Function Generation for Possibility-Based Aircraft Design Optimization." Journal of Aircraft 54 (1): 114–24. https://doi.org/10.2514/1.C033833.

12. Tyan, Maxim, Nhu Van Nguyen, Sangho Kim, and Jae-Woo Lee. 2017. "Comprehensive Preliminary Sizing/Resizing Method for a Fixed Wing-VTOL Electric UAV." Aerospace Science and Technology 71 (December): 30–41. https://doi.org/10.1016/j.ast.2017.09.008.

13. Maw, Aye Aye, Tun Lwin, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2018. "Efficient Approach to Database Integration for an Aerospace Vehicle Design and Certification Framework." Advances in Engineering Software 118 (April): 27–34. https://doi.org/10.1016/j.advengsoft.2018.01.001.

14. Tyan, Maxim, and Jae-Woo Lee. 2019. "Efficient Multi-Response Adaptive Sampling Algorithm for Construction of Variable-Fidelity Aerodynamic Tables." Chinese Journal of Aeronautics 32 (3): 547–58. https://doi.org/10.1016/j.cja.2018.12.012.

15. Tyan, Maxim, Jungwon Yoon, Nhu Van Nguyen, Jae-Woo Lee, and Sangho Kim. 2019. "Design-Airworthiness Integration Method for General Aviation Aircraft during Early Development Stage." Aircraft Engineering and Aerospace Technology 91 (7): 1067–76. https://doi.org/10.1108/AEAT-05-2018-0143.

16. Maw, Aye Aye, Maxim Tyan, and Jae-Woo Lee. 2020. "IADA*: Improved Anytime Path Planning and Replanning Algorithm for Autonomous Vehicle." Journal of Intelligent & Robotic Systems 100 (3): 1005–13. https://doi.org/10.1007/s10846-020-01240-x.

17. Maw, Aye Aye, Maxim Tyan, Tuan Anh Nguyen, and Jae-Woo Lee. 2021. "IADA*-RL: Anytime Graph-Based Path Planning with Deep Reinforcement Learning for an Autonomous UAV." Applied Sciences 11 (9): 3948. https://doi.org/10.3390/app11093948.

18. Nguyen, Le Viet Thang, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2021. "Enhancement of Light Aircraft 6 DOF Simulation Using Flight Test Data in Longitudinal Motion." The Aeronautical Journal 125 (1290): 1358–79. https://doi.org/10.1017/aer.2021.18.

19. An, Jae-Hyun, Do-Youn Kwon, Kwon-Su Jeon, Maxim Tyan, and Jae-Woo Lee. 2022. "Advanced Sizing Methodology for a Multi-Mode EVTOL UAV Powered by a Hydrogen Fuel Cell and Battery." Aerospace 9 (2): 71. https://doi.org/10.3390/aerospace9020071.

20. Silva, Francisco Airton, Carlos Brito, Gabriel Araújo, Iure Fé, Maxim Tyan, Jae-Woo Lee, Tuan Anh Nguyen, and Paulo Romero Martin Maciel. 2022. "Model-Driven Impact Quantification of Energy Resource Redundancy and Server Rejuvenation on the Dependability of Medical Sensor Networks in Smart Hospitals." Sensors 22 (4): 1595. https://doi.org/10.3390/s22041595.

21. Tyan, Maxim, Cheol Kyun Choi, Tuan Anh Nguyen, and Jae-Woo Lee. 2022. "Rapid Airfoil Inverse Design Method with a Deep Neural Network and Hyperparameter Selection." International Journal of Aeronautical and Space Sciences, Accepted for publication in June 2022

22. Pham, Vinh, Maxim Tyan, Tuan Anh Nguyen, Chiho Lee, Le Viet Thang Nguyen, Jae-Woo Lee. 2023. "Adaptive data fusion framework for modeling of non-uniform aerodynamic data", Chinese Journal of Aeronautics 36(7): 316-336. https://www.sciencedirect.com/science/article/pii/S1000936123001644

23. Lee, Jae Lyun, Maxim Tyan, Do Youn Kwon, Jae-Woo Lee. 2023. "Enhanced Calibration and Performance Prediction Method for Entire Propulsion System of eVTOL UAV", IEEE Transactions on Transportation Electrification. https://doi.org/10.1109/TTE.2023.3326382

Other Journals

24. 성동규, 줄리안 나드히, 장막심, 김상호, 이재우, 전익기형 무인기의 비행 안정성 향상을 위한 형상 최적화 연구, J. Korean Soc. Aeronaut. Space Sci. 48(10), 809-819(2020)

25. Vinh Pham, Mukyeom Kim, Maxim Tyan, and Jae-Woo Lee, "Numerical Experience with Variable-fidelity Metamodeling for Aerodynamic Data Fusion Problems," Journal of Defense Acquisition and Technology, vol. 1, no. 1, pp. 1–8, Jun. 2019.

26. Jinhwan Park, Maxim Tyan, Nhu Van Nguyen, Sangho Kim, and Jae-Woo Lee, "Flap Design Optimization for KLA-100 Aircraft in Compliance with Airworthiness Certification", Journal of Korean Society for Aeronautical and Space Sciences, vol. 41, no. 8, pp 649–656, 2013

27. Jimin Kim, Nhu Van Nguyen, Jung-Il Shu, Maxim Tyan, Jae-Woo Lee, and Sangho Kim, "UAV Performance Improvement using Integrated Analysis and Design Optimization Technology", Journal of the Korean Society for Aviation and Aeronautics, vol. 21, no. 1, 2013

28. 이재우, 누엔반, 툰린, 장막심, 박승빈, 김상호, 김임권. (2012). Development of Design-Certification-Analysis Integration Software for Small Aircraft (CADIS-SA). 한국항공우주학회 학술발표회 초록집, 1302-1310.

Conference Proceedings

2022

1. Hyeon, Jeongseok, Chiho Lee, Le Viet Thang Nguyen, Minseok Jang, Maxim Tyan, and Jae-Woo Lee. 2022. "EVTOL 천이 비행을 위한 Tilt Corridor 도출 기법 연구." In Proceedings of the Spring Conference of The Korean Society for Aeronautical and Space Sciences. Gangwon-do, Korea.

2. Kwag, Tae Ho, Le Viet Thang Nguyen, Maxim Tyan, and Jae-Woo Lee. 2022. "SITL 인터페이스 기반 고정밀 EVTOL 가상 환경 구축." In Proceedings of the Spring Conference of The Korean Society for Aeronautical and Space Sciences. Gangwon-do, Korea.

3. Kwon, Do Youn, Jae Lyun Lee, Zin Win Thu, Ahyun Choi, Maxim Tyan, and Jae-Woo Lee. 2022. "EVTOL 성능향상을 위한 수소연료전지-배터리 하이브리드 추진 시스템 동력 분배 기법 연구." In Proceedings of the Spring Conference of The Korean Society for Aeronautical and Space Sciences. Gangwon-do, Korea.

4. Nguyen, Thang L., Taeho Kwag, Chiho Lee, Maxim Tyan, and Jae-Woo Lee. 2022. "Development of Validation Strategy for High Precision Simulation Model of Multicopter UAV."

In AIAA AVIATION 2022 Forum. AIAA AVIATION Forum. American Institute of Aeronautics and Astronautics. https://doi.org/10.2514/6.2022-3940.

5. Pham, Vinh, Chi-ho Lee, LV Thang Nguyen, Maxim Tyan, and Jae-Woo Lee. 2022. "Development of Advanced Surrogated-Based Data Fusion Approach for Aerodynamic Database Construction." In AIAA Aviation, 9. Chicago, IL.
6. Thu, Zin W., Jae-Hyun Ahn, Jae-Lyun Lee, Do-Youn Kwon, Yeon-Ju Choi, Woon-Jae Won, Maxim Tyan, and Jae-Woo Lee. 2022. "Enhanced Performance Prediction of Hydrogen Fuel Cell Powered EVTOL UAV." In AIAA AVIATION 2022 Forum. AIAA AVIATION Forum. American Institute of Aeronautics and Astronautics. https://doi.org/10.2514/6.2022-3382.
7. Won, Woon Jae, Wonkyong Kim, Maxim Tyan, and Jae-Woo Lee. 2022. "EVTOL 항공기의 착륙장치 지상하중해석 기법 연구." In Proceedings of the Spring Conference of The Korean Society for Aeronautical and Space Sciences. Gangwon-do, Korea.

2021

8. Tyan, Vinh Pham, Nadhie Juliawan, Sangho Kim, and Jae-Woo Lee. 2018. "A Data Fusion Method Using Combined Variable Fidelity Modeling and Space Mapping for Aerodynamic Database." In The Asia-Pacific International Symposium on Aerospace Technology. China.
9. Pham, Vinh, Mukyeom Kim, Maxim Tyan, and Jae-Woo Lee. 2018. "A Multi-Level Kriging Approach for Variable Fidelity Aerodynamic Database Construction." In 2018 KSAS Fall Conference. Jejudo, Rep. of Korea.
10. Tyan, Maxim, Mukyeom Kim, Vinh Pham, Cheol Kyun Choi, Nguyen Le Viet Thang, and Jae-Woo Lee. 2018. "Development of Advanced Aerodynamic Data Fusion Techniques for Flight Simulation Database Construction." In AIAA AVIATION, 10. Atlanta, Georgia: Amer. Instit. of Aeronautics and Astronautics.

2020

11. An, Jaehyun, Zin Win Thu, Jae Lyun Lee, Youngjae Lee, Jae Seon Min, Maxim Tyan, Seung Hyeog Nah, and Jae-Woo Lee. 2020. "수소연료전지 도심항공교통수단의 성능운용분석 연구 (Performance Operation Analysis Study on Hydrogen Fuel Cell Urban Air Mobility)." In 한국항공우주학회 2020 추계학술대회 논문집. Jeju, Korea: 한국항공우주학회.
12. Jeong, Gu Moon, Young Jae Lee, Tae Ho Kwag, Maxim Tyan, and Jae-Woo Lee. 2020. "Human Factor and Pilot Performance Quantitative Analysis for Flight Training Effectiveness in VR Simulation Environment." In The Past, Present and Future of Flight Simulation - Technology, Training and Regulatory Challenges. London, UK: Royal Aeronautical Society.
13. Kim, Wonkyung, Maxim Tyan, and Jae-Woo Lee. 2020. "감항인증기술기준 연구를 통한 전익기형 수직이착륙 무인기 비행하중해석."
14. Lee, Chiho, Maxim Tyan, and Jae-Woo Lee. 2020. "전익기형 UAV 의 Tilt-Rotor 설계 및 비행시험을 통한 검증." In 한국항공우주학회 2020 추계학술대회 논문집. Jeju, Korea.
15. Nguyen, Le Viet Thang, Tae Ho Kwag, Gumoon Jeong, Maxim Tyan, and Jae-Woo Lee. 2020. "EVTOL 비행체 추진시스템 모델링 구축 및 검증을 위한 실험적 연구." In 한국항공우주학회 2020 추계학술대회 논문집. Jeju, Korea.

16. Nguyen, LV Thang, Gu Moon Jeong, Maxim Tyan, and Jae-Woo Lee. 2020. "Flight Test Maneuvers Design for Improvement and Validation of Multicopter 6DOF Simulator." In The Past, Present and Future of Flight Simulation - Technology, Training and Regulatory Challenges. London: Royal Aeronautical Society.
17. Nguyen, LV Thang, Tae Ho Kwag, Gu Moon Jeon, Maxim Tyan, and Jae-Woo Lee. 2020. "Experimental Setup for Construction and Validation of Propulsion System Modeling for EVTOL Vehicle." In 한국항공우주학회 2020 추계학술대회 논문집. Jeju, Korea.
18. Pham, Vinh, Mukyeom Kim, Maxim Tyan, and Jae-Woo Lee. 2020. "Development of Advanced Data Fusion Techniques for Data Processing in Support of High-Fidelity Flight Simulation." In Proceedings of the Asian Congress of Structural and Multidisciplinary Optimization. Seoul, Korea.
19. Pham, Vinh, LV Thang Nguyen, Nadhie Juliawan, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2020a. "Multi-Fidelity Metamodel Network Method for Complex Engineering Data Processing Problems in Support of Accurate Flight Simulation." In 한국항공우주학회 2020 춘계학술대회 논문집. Gangwon-do, Korea.
20. Pham, Vinh, LV Thang Nguyen, Nadhie Juliawan, Maxim Tyan, Jae-Woo Lee, and Sangho Kim. 2020. "Repetitively Enhanced Multi-Fidelity Modelling Network Method for Complex Engineering Data Processing Problems in Support of Accurate Flight Simulation." In Proceedings of the Spring Conference of The Korean Society for Aeronautical and Space SciencesProceedings of the Spring Conference of The Korean Society for Aeronautical and Space Sciences. Gangwondo, Korea.
21. Thu, Zin Win, Jae-Lyun Lee, Vinh Pham, Dong-Gyu Seong, Jae-Hyun An, Maxim Tyan, and Jae-Woo Lee. 2020. "Performance Analysis Code Development for Preliminary Design of Hydrogen Powered Vertical Takeoff and Landing UAV." In , 2.
22. Tyan, Maxim, Seong Dong-Gyu, Jae Hyun Anh, Vinh Pham, and Jae-Woo Lee. 2020. "Configuration Sizing and Optimization of a 25kg VTOL-UAV Powered by a Hydrogen Fuel Cell." In Asian Congress of Structural and Multidisciplinary Optimization 2020 (ACSMO2020). Seoul, Korea.
23. Tyan, Maxim, Aye Aye Maw, Kwon-su Jeon, Mina Jang, and Jae-Woo Lee. 2020. "Digital Twin System for Future Urban Air Mobility. Technology Overview." In Korean Society for Aeronautical and Space Sciences. Jeju, Korea.
24. Zin, Win Thu, Jae Lyun Lee, Quang Vinh Pham, Dong Gyu Seong, Jae Hyun An, Maxim Tyan, and Jae-Woo Lee. 2020. "Performance Analysis Code Development for Preliminary Design of Hydrogen Powered Vertical Takeoff and Landing UAV." In Korean Society for Aeronautical and Space Sciences. Jeju, Korea.

2019

25. Maxim Tyan, Aye Aye Maw, LV Thang Nguyen, and Gumoon Jeong, "Development of Flight Dynamics Model for Wearable Display Device Drone Flight Simulator," in 2019 19th International Conference on Control, Automation and Systems, Jeju, Korea, 2019.

26. Dong Gyu Seong, Maxim Tyan, Sangho Kim, and Jae-Woo Lee, "Flying-Wing Type UAV Design Optimization by Incorporating Flight Stability Constraints," in Asia Pacific International Symposium on Aerospace Technology, Gold Coast, Australia, 2019.
27. Aye Aye Maw, Maxim Tyan, and Jae-Woo Lee, "Development of Flight Mission Planner using Intelligent Anytime Planning and Replanning Algorithm for UAV Operation," in International Conference on Computer Applications, Yangon, Myanmar, 2019.
28. Dong Gyu Seong, Maxim Tyan, and Jae-Woo Lee, "전익기형 무인기의 안정성 확보를 위한 형상 최적화 (Design Optimization of a Flying Wing UAV to Secure Aicrat Stability)," in KSAS 2019 Fall Conference, Jeju, Korea, 2019.
29. Vinh Pham, Mukyeom Kim, LV Thang Nguyen, Maxim Tyan, and Jae-Woo Lee, "Improved Aerodynamic Data Fusion Techniques using Local Fidelity Method for Accurate Flight Simulation," in 2019 KSAS Spring Conference, Gangwon-do, Korea, 2019.
30. Vinh Pham, Mukyeom Kim, Nadhie Juliawan, Maxim Tyan, Jae-Woo Lee, and S. Kim, "Data Fusion Technique for Noisy and Multi-fidelity Data Processing in Support of Accurate Flight Simulation," in KSAS 2019 Fall Conference, Jeju, Korea, 2019.
31. LV Thang Nguyen, Maxim Tyan, Gumoon Jeong, and Jae-Woo Lee, "Fighter Aircraft Virtual Flight Test and Certification using Multi-Fidelity Aerodynamic Databases," in KSAS 2019 Fall Conference, Jeju, Korea, 2019.
32. Aye Aye Maw, Maxim Tyan, and Jae-Woo Lee, "Dynamic Obstacle Avoidance using Deep Reinforcement Learning Network for Autonomous UAV," in KSAS 2019 Fall Conference, Jeju, Korea, 2019.
33. Jaehyun Ahn, Jae-Woo Lee, Maxim Tyan, and Dong Gyu Seong, "축소모델의 비행시험을 통한 1 인승 PAV 실기체 동안정성 예측 연구 (1-seater PAV performance prediction through scaled model flight test)," in KSAS 2019 Fall Conference, Jeju, Korea, 2019.

2018

34. Maxim Tyan, and Jae-Woo Lee, "Development of Advanced Aerodynamic Data Fusion Techniques for Flight Simulation Database Construction", AIAA Aviation 2018
35. Cheol-Kyun Choi, Aye Aye Maw, Mu-Kyeom Kim, Maxim Tyan, and Jae-Woo Lee, "A Deep Learning Based Airfoil Design Algorithm Imitate Trial and Error Method", The Asian Congress of Structural and Multidisciplinary Optimization, May 21-24, 2018, Dalian, China
36. MuKyeom Kim, Maxim Tyan, Vinh Pham, Nadhie Juliawan, Sangho Kim, Jae-Woo Lee, "A Data Fusion Method using Combined Variable Fidelity Modeling and Space Mapping for Aerodynamic Database", The Asia-Pacific International Symposium on Aerospace Technology (APISAT 2018), October 16-18, 2018, China
37. Aye Aye Maw, Maxim Tyan, and Jae-Woo Lee, "A Real-time UAV Mission Planner in Unknown Environment Using Anytime Dynamic Algorithm", Korean Society for Aeronautical and Space Sciences Spring Conference, Gangwon-do, Korea, April 2018
38. Aye Aye Maw, Maxim Tyan, Dong Sik Kim, and Jae-Woo Lee, "Improved Anytime Path Planning Algorithm for Real-time UAV Operation", 2018 18th International Conference on

Control, Automation and Systems, Oct. 17~20, 2018: YongPyong Resort, PyeongChang, GangWon, Korea

2017

39. Maxim Tyan, and Jae-Woo Lee, "Construction of Aerodynamic Tables using Variable Fidelity Aerodynamic Analysis and Sequential Sampling Method", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
40. LV Thang Nguyen, Maxim Tyan, Nadhie Juliwan, Nhu Van Nguyen, Sangho Kim, and Jae-Woo Lee, "Development of a Validation Procedure for JSBSim Flight Dynamics Model Using Dynamically Scaled Model Flight Test Data", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
41. Aye Aye Maw, Maxim Tyan, and Jae-Woo Lee, "A Combine Approach for Mission Planning in Dynamic Environment Using Sample-based Algorithm and Funnel Libraries", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
42. Nadhie Juliawan, Maxim Tyan, Sangho Kim, and Jae-Woo Lee, "Process Automation of Computational Fluid Dynamics for Support of Aircraft Multidisciplinary Design Optimization", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
43. Febriyan Prayoga, Maxim Tyan, Sangho Kim, and Jae-Woo Lee, "Smart Drone Aerodynamic Predictions Using Open Source CFD Codes", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
44. Wai Nwe Tun, Maxim Tyan, Sangho Kim, and Jae-Woo Lee, "Using HOG Descriptors on Superpixels for Human Detection of UAV Imagery", 2017 Asia-Pacific International Symposium on Aerospace Technology, 16-18 October, Seoul, Korea
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