## Prof. Cengiz Hacızade

#### **Personal Information**

Office Phone: +90 212 285 3105

Email: cingiz@itu.edu.tr

Web: https://avesis.itu.edu.tr/cingiz

# International Researcher IDs ORCID: 0000-0003-4115-341X

Publons / Web Of Science ResearcherID: ABA-9626-2020

ScopusID: 56395481600 Yoksis Researcher ID: 51635

### **Education Information**

Doctorate, Azerbaycan Devlet Neft Akademisi, Kontrol Mühendisliği, Azerbaijan 1983 - 1986 Undergraduate, Moskova Havacılık Enstitüsü (Ulusal Araştırma Üniversitesi), Uçan Araçların Otomatik Kontrol Sistemleri, Russia 1975 - 1981

### Foreign Languages

Russian

#### **Dissertations**

Doctorate, YARI BATIRILMIŞ YÜZEN SONDAJ PLATFORMUNUN DURUMUNUN OTOMATİK DENETİM VE KONTROL SİSTEMİ İÇİN İNFORMASYON BİRİKTİRİMİ , Azerbaycan Devlet Neft Akademisi, Kontrol Mühendisliği, 1986

### **Research Areas**

Technical Sciences, Aeronautical and Space Engineering

## **Academic Titles / Tasks**

Professor, Istanbul Technical University, Uçak Ve Uzay Bilimleri Fakültesi, Uçak Mühendisliği Bölümü, 1996 - Continues

### Courses

Aviyonik Navigasyon Sistemleri, Postgraduate, 2023 - 2024

Published journal articles indexed by SCI, SSCI, and AHCI

I. Attitude filtering with uncertain process and measurement noise covariance using SVD-aided adaptive UKF

Hajiyev C., Çilden Güler D.

International Journal of Robust and Nonlinear Control, vol.33, no.17, pp.10512-10531, 2023 (SCI-Expanded)

II. TRIAD-Aided Multiplicative EKF for Small Satellite Attitude Estimation and Magnetometer Calibration Kinatas H., Hajiyev C.

IEEE Sensors Journal, vol.23, no.22, pp.27161-27168, 2023 (SCI-Expanded)

III. Geomagnetic storms in the context of spacecraft attitude estimation under different noise levels Cilden Güler D., Kaymaz Z., Hajiyev C.

Advances in Space Research, vol.72, no.7, pp.2733-2740, 2023 (SCI-Expanded)

IV. Fault-tolerant state estimation methods of cluster satellites

Yunus Erkec T., Hajiyev C.

Advances in Space Research, vol.71, no.9, pp.3868-3882, 2023 (SCI-Expanded)

V. An innovation-based actuator/surface fault detection, isolation and filter tuning Hajiyev C.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.95, no.3, pp.464-473, 2023 (SCI-Expanded)

VI. Attitude and gyro bias estimation by SVD-aided EKF

Hajiyev C., Çilden Güler D.

MEASUREMENT, vol.205, 2022 (SCI-Expanded)

VII. Identification of hydrodynamic coefficients of AUV in the presence of measurement biases

Dinc M., Hajiyev C.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART M-JOURNAL OF ENGINEERING FOR THE MARITIME ENVIRONMENT, vol.236, no.3, pp.756-763, 2022 (SCI-Expanded)

VIII. Formation Flight for Close Satellites With GPS-Based State Estimation Method

Erkec T. Y., Hacızade C.

IEEE SENSORS JOURNAL, vol.22, no.15, pp.15457-15464, 2022 (SCI-Expanded)

IX. Backup Magnetometer-Only Attitude Estimation Algorithm for Small Satellites

Yakupoglu-Altuntas S., Eşit M., SÖKEN H. E., Hajiyev C.

IEEE SENSORS JOURNAL, vol.22, no.13, pp.13544-13551, 2022 (SCI-Expanded)

X. INS's Error Compensation via Measurement Differencing Kalman Filter

Hacızade C.

IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.71, 2022 (SCI-Expanded)

XI. NANOSATELLITE ATTITUDE ESTIMATION IN SUN AND ECLIPSE PERIODS WITHOUT GYROSCOPES Hajiyev C., Çilden Güler D.

APPLIED AND COMPUTATIONAL MATHEMATICS, vol.21, no.3, pp.246-258, 2022 (SCI-Expanded)

XII. Satellite attitude estimation using SVD-Aided EKF with simultaneous process and measurement covariance adaptation

Hajiyev C., Çilden Güler D.

ADVANCES IN SPACE RESEARCH, vol.68, no.9, pp.3875-3890, 2021 (SCI-Expanded)

XIII. Geomagnetic disturbance effects on satellite attitude estimation

Çilden Güler D., Kaymaz Z., Hajiyev C.

ACTA ASTRONAUTICA, vol.180, pp.701-712, 2021 (SCI-Expanded)

XIV. Integration of barometric and GPS altimeters via adaptive data fusion algorithm

Hajiyev C., Hacizade U., Çilden Güler D.

INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING, vol.35, no.1, pp.2-14, 2021 (SCI-Expanded)

XV. Attitude Estimation with Albedo Interference on Sun Sensor Measurements

Çilden Güler D., Schaub H., Hajiyev C., Kaymaz Z.

JOURNAL OF SPACECRAFT AND ROCKETS, vol.58, no.1, pp.148-163, 2021 (SCI-Expanded)

XVI. Two-Stage Kalman Filter for Fault Tolerant Estimation of Wind Speed and UAV Flight Parameters Hajiyev C., Çilden Güler D., Hacizade U.

MEASUREMENT SCIENCE REVIEW, vol.20, no.1, pp.35-42, 2020 (SCI-Expanded)

XVII. Nontraditional Attitude Filtering with Simultaneous Process and Measurement Covariance Adaptation

Hajiyev C., Soken H. E., Çilden Güler D.

JOURNAL OF AEROSPACE ENGINEERING, vol.32, no.5, 2019 (SCI-Expanded)

XVIII. Nanosatellite attitude estimation using Kalman-type filters with non-Gaussian noise Çilden Güler D., Raitoharju M., Piche R., Hajiyev C.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.92, pp.66-76, 2019 (SCI-Expanded)

XIX. SVD-aided EKF attitude estimation with UD factorized measurement noise covariance Cilden Güler D., Hajiyev C.

ASIAN JOURNAL OF CONTROL, vol.21, no.4, pp.1423-1432, 2019 (SCI-Expanded)

XX. ROBUST KALMAN FILTER-BASED FAULT-TOLERANT INTEGRATED BARO-INERTIAL-GPS ALTIMETER Contreras A. M., Hacizade C.

METROLOGY AND MEASUREMENT SYSTEMS, vol.26, no.4, pp.673-686, 2019 (SCI-Expanded)

XXI. Evaluation of geomagnetic field models using magnetometer measurements for satellite attitude determination system at low earth orbits: Case studies

Cilden-Guler D., Kaymaz Z., Hajiyev C.

ADVANCES IN SPACE RESEARCH, vol.61, no.1, pp.513-529, 2018 (SCI-Expanded)

XXII. Spacecraft localization by indirect linear measurements from a single antenna

Hajiyev C., Sofyali A.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.90, no.5, pp.734-742, 2018 (SCI-Expanded)

XXIII. SINGLE-FRAME ATTITUDE DETERMINATION METHODS FOR NANOSATELLITES

Cilden Guler D., CONGUROGLU E. S., Hajiyev C.

METROLOGY AND MEASUREMENT SYSTEMS, vol.24, no.2, pp.313-324, 2017 (SCI-Expanded)

XXIV. Review on gyroless attitude determination methods for small satellites

Hajiyev C., Cilden Guler D.

PROGRESS IN AEROSPACE SCIENCES, vol.90, pp.54-66, 2017 (SCI-Expanded)

XXV. NANOSATELLITE ATTITUDE ESTIMATION FROM VECTOR MEASUREMENTS USING SVD-AIDED UKF ALGORITHM

CILDEN D., SOKEN H. E., Hajiyev C.

METROLOGY AND MEASUREMENT SYSTEMS, vol.24, no.1, pp.113-125, 2017 (SCI-Expanded)

XXVI. Gyro-free attitude and rate estimation for a small satellite using SVD and EKF Hajiyev C., Cilden D., SOMOV Y.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.55, pp.324-331, 2016 (SCI-Expanded)

XXVII. Active Fault-Tolerant Control of UAV Dynamics against Sensor-Actuator Failures Çalışkan F., HAJIYEV C.

JOURNAL OF AEROSPACE ENGINEERING, vol.29, no.4, 2016 (SCI-Expanded)

XXVIII. Sensor Calibration Design Based on D Optimality Criterion

HACIZADE C.

Metrology and Measurement Systems, vol.23, no.3, pp.413-424, 2016 (SCI-Expanded)

XXIX. Orbital Calibration of Microsatellite Magnetometers Using a Linear Kalman Filter Hajiyev C.

MEASUREMENT TECHNIQUES, vol.58, no.9, pp.1037-1043, 2015 (SCI-Expanded)

XXX. Single Station Antenna-Based Spacecraft Orbit Determination via Robust EKF against the Effect of Measurement Matrix Singularity

Sofyali A., HAJIYEV C.

JOURNAL OF AEROSPACE ENGINEERING, vol.28, no.1, 2015 (SCI-Expanded)

XXXI. Integration of navigation systems for autonomous underwater vehicles

Dinc M., Hajiyev C.

JOURNAL OF MARINE ENGINEERING AND TECHNOLOGY, vol.14, no.1, pp.32-43, 2015 (SCI-Expanded)

XXXII. REKF and RUKF for pico satellite attitude estimation in the presence of measurement faults

Soeken H. E., HAJIYEV C.

JOURNAL OF SYSTEMS ENGINEERING AND ELECTRONICS, vol.25, no.2, pp.288-297, 2014 (SCI-Expanded)

XXXIII. Robust Kalman filtering for small satellite attitude estimation in the presence of measurement faults Soken H. E., HAJIYEV C., SAKAI S.

EUROPEAN JOURNAL OF CONTROL, vol.20, no.2, pp.64-72, 2014 (SCI-Expanded)

XXXIV. Robust adaptive unscented Kalman filter for attitude estimation of pico satellites

Hajiyev C., SOKEN H. E.

INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING, vol.28, no.2, pp.107-120, 2014 (SCI-Expanded)

XXXV. Generalized Rayleigh quotient based innovation covariance testing applied to sensor/actuator fault detection

Hajiyev C.

MEASUREMENT, vol.47, pp.804-812, 2014 (SCI-Expanded)

XXXVI. Extended Kalman filter application for high-noise cancelation in control telemetry channels of oil electric submersible pump

Ali-Zade P., HAJIYEV C., Hajiyeva U., YILMAZ M.

JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING, vol.110, pp.109-118, 2013 (SCI-Expanded)

XXXVII. Two-stage Kalman filter-based actuator/surface fault identification and reconfigurable control applied to F-16 fighter dynamics

Hajiyev C.

INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING, vol.27, no.9, pp.755-770, 2013 (SCI-Expanded)

XXXVIII. Adaptive Fading UKF with Q-Adaptation: Application to Picosatellite Attitude Estimation Soken H. E., HAJIYEV C.

JOURNAL OF AEROSPACE ENGINEERING, vol.26, no.3, pp.628-636, 2013 (SCI-Expanded)

XXXIX. A review of in-flight detection and identification of aircraft icing and reconfigurable control Çalışkan F., HAJIYEV C.

PROGRESS IN AEROSPACE SCIENCES, vol.60, pp.12-34, 2013 (SCI-Expanded)

XL. Robust Adaptive Kalman Filter for estimation of UAV dynamics in the presence of sensor/actuator faults

Hajiyev C., SOKEN H. E.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.28, no.1, pp.376-383, 2013 (SCI-Expanded)

XLI. Identification of Orbital Measurements

Hacızade C.

Measurement Techniques, vol.55, no.11, pp.1234-1239, 2013 (SCI-Expanded)

XLII. Identification of orbital measurements of spacecraft

Hajiyev C.

MEASUREMENT TECHNIQUES, vol.55, no.11, pp.1234-1239, 2013 (SCI-Expanded)

XLIII. UKF-Based Reconfigurable Attitude Parameters Estimation and Magnetometer Calibration Soken H. E., HAJIYEV C.

IEEE TRANSACTIONS ON AEROSPACE AND ELECTRONIC SYSTEMS, vol.48, no.3, pp.2614-2627, 2012 (SCI-Expanded)

XLIV. UKF based in-flight calibration of magnetometers and rate gyros for pico satellite attitude determination

Soeken H. E., HAJIYEV C.

ASIAN JOURNAL OF CONTROL, vol.14, no.3, pp.707-715, 2012 (SCI-Expanded)

XLV. Fault tolerant integrated radar/inertial altimeter based on Nonlinear Robust Adaptive Kalman filter Hajiyev C.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.17, no.1, pp.40-49, 2012 (SCI-Expanded)

XLVI. Tracy-Widom distribution based fault detection approach: Application to aircraft sensor/actuator fault detection

Hajiyev C.

ISA TRANSACTIONS, vol.51, no.1, pp.189-197, 2012 (SCI-Expanded)

XLVII. Robust Estimation of UAV Dynamics in the Presence of Measurement Faults

Hajiyev C., SOKEN H. E.

JOURNAL OF AEROSPACE ENGINEERING, vol.25, no.1, pp.80-89, 2012 (SCI-Expanded)

XLVIII. Innovation based two-interval overlap test for failure prediction in measurement systems

Hajiyev C.

MEASUREMENT, vol.44, no.9, pp.1543-1550, 2011 (SCI-Expanded)

XLIX. GNSS SIGNALS PROCESSING VIA LINEAR AND EXTENDED KALMAN FILTERS

Hajiyev C.

ASIAN JOURNAL OF CONTROL, vol.13, no.2, pp.273-282, 2011 (SCI-Expanded)

L. Testing the covariance matrix of the innovation sequence with sensor/actuator fault detection applications

Hajiyev C.

INTERNATIONAL JOURNAL OF ADAPTIVE CONTROL AND SIGNAL PROCESSING, vol.24, no.9, pp.717-730, 2010 (SCI-Expanded)

LI. Pico satellite attitude estimation via Robust Unscented Kalman Filter in the presence of measurement faults

Soken H. E., HAJIYEV C.

ISA TRANSACTIONS, vol.49, no.3, pp.249-256, 2010 (SCI-Expanded)

LII. Determination of optimum measurement points via A-optimality criterion for the calibration of measurement apparatus

Hajiyev C.

MEASUREMENT, vol.43, no.4, pp.563-569, 2010 (SCI-Expanded)

LIII. Fault detection in sensor information fusion Kalman filter

Okatan A., HAJIYEV C., Hajiyeva U.

AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.63, no.9, pp.762-768, 2009 (SCI-Expanded)

LIV. Aircraft icing detection, identification, and reconfigurable control based on Kalman filtering and neural networks

Caliskan F., AYKAN R., HAJIYEV C.

JOURNAL OF AEROSPACE ENGINEERING, vol.21, no.2, pp.51-60, 2008 (SCI-Expanded)

LV. Fuzzy logic-based automated engine health monitoring for commercial aircraft

Demirci S., HACIYEV C., SCHWENKE A.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.80, no.5, pp.516-525, 2008 (SCI-Expanded)

LVI. Determining the Operating Conditions of Floating Marine Plotforms Based on the Predicted Motion Control Under Conditions of Wind and Wave Disturbances

Hacızade C.

Measurement Techniques, vol.51, no.1, pp.28-33, 2008 (SCI-Expanded)

LVII. Adaptive filtration algorithm with the filter gain correction applied to integrated INS/radar altimeter Hajiyev C.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART G-JOURNAL OF AEROSPACE ENGINEERING, vol.221, pp.847-855, 2007 (SCI-Expanded)

LVIII. Innovation approach based measurement error self-correction in dynamic systems Hajiyev C.

MEASUREMENT, vol.39, no.7, pp.585-593, 2006 (SCI-Expanded)

LIX. A Sequential Method of Calibrating Measurement Instruments with a Kalman filter Hacızade C.

MEASUREMENT TECHNIQUES, vol.49, no.4, pp.357-366, 2006 (SCI-Expanded)

LX. Kalman filter and neural network-based icing a identification applied to A340 aircraft dynamics Aykan R., HAJIYEV C., CALISKAN F.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.77, no.1, pp.23-33, 2005 (SCI-Expanded)

LXI. Sensor and control surface/actuator failure detection and isolation applied to F-16 flight dynamic Hajiyev C., CALISKAN F.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.77, no.2, pp.152-160, 2005 (SCI-Expanded)

LXII. Error analysis and motion determination of a flight simulator

Yurt S. N., Ozkol I., HAJIYEV C.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.76, no.2, pp.185-192, 2004 (SCI-Expanded)

LXIII. Attitude Determination and Control System Design of the ITU UUBF LEO1 Satellite

Hacızade C

ACTA ASTRONAUTICA, vol.52, pp.493-499, 2003 (SCI-Expanded)

LXIV. An Approach to Improve the Offshore Platform Coordinates Accuracy by Using Multichannel Kalman Filtering

Hacızade C.

ISA Transactions, Journal of Automation and Measurement, vol.42, no.1, pp.53-61, 2003 (SCI-Expanded)

LXV. An approach to improve the offshore platform coordinates accuracy by using multichannel Kalman filtering

Hacızade C., Çalışkan F.

ISA TRANSACTIONS, vol.42, no.1, pp.53-61, 2003 (SCI-Expanded)

LXVI. Optimization of the PD coefficient in a flight simulator control via genetic algorithms

Yurt S. N., Ozkol I., KAYA M., HACIYEV C.

AIRCRAFT ENGINEERING AND AEROSPACE TECHNOLOGY, vol.74, no.2, pp.147-153, 2002 (SCI-Expanded)

LXVII. Integrated sensor/actuator FDI and reconfigurable control for fault-tolerant flight control system design

Hacızade C., Çalışkan F.

AERONAUTICAL JOURNAL, vol.105, no.1051, pp.525-533, 2001 (SCI-Expanded)

LXVIII. Optimization of the allowed drilling area in the operation of offshore platforms

Hacızade C.

MEASUREMENT TECHNIQUES, vol.44, no.6, pp.590-593, 2001 (SCI-Expanded)

LXIX. Integrated sensor actuator FDI and reconfigurable control for fault tolerant flight control system design

Hacızade C.

The Aeronautical Journal, vol.105, no.1051, pp.525-533, 2001 (SCI-Expanded)

LXX. Sensor/actuator fault diagnosis based on statistical analysis of innovation sequence and Robust Kalman Filtering

Hajiyev C., CALISKAN F.

AEROSPACE SCIENCE AND TECHNOLOGY, vol.4, no.6, pp.415-422, 2000 (SCI-Expanded)

LXXI. A recurrent algorithm for estimating a linear regression model with account of the regression vector error

Hacızade C.

Industrial Laboratory, vol.66, no.7, pp.486-489, 2000 (SCI-Expanded)

LXXII. Innovation sequence application to aircraft sensor fault detection: comparison of checking covariance matrix algorithms

Caliskan F., HAJIYEV C.

ISA TRANSACTIONS, vol.39, no.1, pp.47-56, 2000 (SCI-Expanded)

LXXIII. A optimal plan for locating extension wells when prospecting for oil deposits

Hacızade C

MEASUREMENT TECHNIQUES, vol.43, no.3, pp.222-228, 2000 (SCI-Expanded)

LXXIV. Sensor Fault Detection in Flight Control Systems Based on the Kalman Filter Innovation Sequence Hacızade C.

IMechE Proceedings, Part I, J.Systems & Control Engineering, vol.213, pp.243-248, 1999 (SCI-Expanded)

LXXV. Sensor fault detection in flight control systems based on the Kalman filter innovation sequence

Çalışkan F., Hacızade C.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART I-JOURNAL OF SYSTEMS AND CONTROL ENGINEERING, vol.213, pp.243-248, 1999 (SCI-Expanded)

LXXVI. Distributions of scalar measures of a Wishart random matrix

Hacızade C.

Industrial Laboratory, vol.0, no.5, pp.340-341, 1999 (SCI-Expanded)

LXXVII. Experimental Design in Problems Involving Measurement of the Mass of Petroleum Products in Storage Tanks

Hacızade C.

MEASUREMENT TECHNIQUES, vol.39, no.6, pp.629-632, 1996 (SCI-Expanded)

LXXVIII. Multidimensional Dynamical System Mathematical Model Adequacy Operative Verifying Hacızade C.

AUTOMATION AND REMOTE CONTROL, vol.56, no.7, pp.949-955, 1995 (SCI-Expanded)

LXXIX. Sequential Method for Verifying Adequacy of Mathematical Models for Multidimensional Dynamical Systems with Biased Measurements

Hacızade C.

MEASUREMENT TECHNIQUES, vol.38, no.10, pp.1082-1088, 1995 (SCI-Expanded)

LXXX. Problems in Analyzing Hydrostatic Measurements of the Mass of Petroleum Products by Data Measurement Systems

Hacızade C.

MEASUREMENT TECHNIQUES, vol.37, no.12, pp.1063-1067, 1994 (SCI-Expanded)

### Articles Published in Other Journals

I. Estimation of the Relative States of Satellite Formation Flights Using the Adaptive Extended Kalman Filter

Tuncay Yunus Erkec Y., Chingiz Hajiyev H.

Gyroscopy and Navigation, vol.14, no.2, pp.154-165, 2023 (Scopus)

II. A Covariance Matching-Based Adaptive Measurement Differencing Kalman Filter for INS's Error Compensation

Hajiyev C., Hacizade U.

WSEAS Transactions on Systems and Control, vol.18, pp.478-486, 2023 (Scopus)

III. TRIAD aided adaptive Kalman filter for fault tolerant attitude estimation of a nanosatellite Kinatas H., Hajiyev C.

International Journal of Sustainable Aviation, vol.9, no.3, pp.191-204, 2023 (ESCI)

IV. Magnetic Torquers Only Attitude Control of a 3U Cube Satellite

Erturk M. F., HACIZADE C.

WSEAS Transactions on Signal Processing, vol.18, pp.128-133, 2022 (Peer-Reviewed Journal)

V. GNSS-based position estimation with Kalman filters

Sever M., Hajiyev C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.8, no.3, pp.181-197, 2022 (ESCI)

VI. TRIAD-Aided EKF for Satellite Attitude Estimation and Sensor Calibration

Gokcay M. A., Hajiyev C.

WSEAS Transactions on Applied and Theoretical Mechanics, vol.17, pp.207-214, 2022 (Scopus)

VII. QUEST Aided EKF for Attitude and Rate Estimation Using Modified Rodrigues Parameters Kinatas H., Hajiyev C.

WSEAS Transactions on Systems and Control, vol.17, pp.250-261, 2022 (Scopus)

VIII. Sensor FDI and reconfiguration in B-747 aircraft flight control system

Güven A., Hacızade C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.8, no.4, pp.312-335, 2022 (ESCI)

IX. Fault Tolerant Attitude Estimation for a Nanosatellite Using Adaptive Kalman Filter with Single Scaling Factor

Kinataş H., HACIZADE C.

Havacılık ve Uzay Teknolojileri Dergisi, vol.15, no.2, pp.74-93, 2022 (Peer-Reviewed Journal)

X. Comparison of TRIAD+EKF and TRIAD+UKF Algorithms for Nanosatellite Attitude Estimation Gokcay M. A., Hajiyev C.

WSEAS Transactions on Systems and Control, vol.17, pp.201-206, 2022 (Scopus)

XI. Fault-tolerant estimation of satellite orbital states

Erkec T. Y., Hajiyev C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.7, no.3, pp.203-226, 2021 (ESCI)

XII. GNSS Signal Processing with EKF and UKF for Stationary User Position Estimation Sever M., HACIZADE C.

WSEAS TRANSACTIONS ON SIGNAL PROCESSING, vol.17, pp.75-80, 2021 (Peer-Reviewed Journal)

XIII. Active fault tolerant flight control for UAV actuator failures

Mammadov H., HACIZADE C.

Mathematics In Engineering, Science And Aerospace, vol.10, no.4, pp.657-670, 2019 (Scopus)

XIV. Two-Stage Kalman Filter for Estimation of Wind Speed and UAV States by using GPS, IMU and Air Data System

HACIZADE C., ÇİLDEN GÜLER D., Hacizade U.

WSEAS Transactions On Electronics, vol.10, pp.60-65, 2019 (Peer-Reviewed Journal)

XV. SVD-Aided UKF for Estimation of Nanosatellite Rotational Motion Parameters

ÇİLDEN GÜLER D., Soken H. E., HACIZADE C.

WSEAS Transactions on Signal Processing, vol.14, pp.27-35, 2018 (Peer-Reviewed Journal)

XVI. Fault tolerant control of attitude dynamics of nanosatellites

Cilden-Guler D., Hajiyev C., Dasdemir J.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.4, no.2, pp.99-113, 2018 (ESCI)

XVII. Attitude and Rate Estimation for Nanosatellite from Vector Measurements Using SVD-Aided UKF Algorithm

ÇİLDEN GÜLER D., SOKEN H. E., HACIZADE C.

International Journal of Mathematical and Computational Methods, vol.2, pp.346-353, 2017 (Peer-Reviewed Journal)

XVIII. Singular value decomposition based satellite attitude determination using different sensor configurations

Guler D., Hajiyev C.

International Journal of Metrology and Quality Engineering, vol.8, 2017 (Scopus)

XIX. Two-stage Kalman filter for estimating the actuator control effectiveness factors of UAV Vural S. Y., Hajiyev C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.3, no.3, pp.233-251, 2017 (ESCI)

XX. Fault tolerant estimation of electro-mechanical actuator parameters via robust EKF Hajiyev C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.3, no.2, pp.100-114, 2017 (ESCI)

XXI. Sensor Actuator Fault Detection Isolation and Accommodation Applied to UAV Model VURAL S. Y., HACIZADE C.

Journal of Aeronautics and Space Technologies, vol.9, no.2, pp.1-12, 2016 (Peer-Reviewed Journal)

XXII. Nontraditional Approach to Satellite Attitude Estimation

HACIZADE C., ÇİLDEN D.

International Journal of Control Systems and Robotics, vol.1, pp.19-28, 2016 (Peer-Reviewed Journal)

XXIII. Fault tolerant estimation of F-16 fighter dynamics against sensor faults COMAS-BURCET J., Hajiyev C.

INTERNATIONAL JOURNAL OF SUSTAINABLE AVIATION, vol.2, no.1, pp.52-73, 2016 (ESCI)

XXIV. In orbit magnetometer bias and scale factor calibration

HACIZADE C.

International Journal of Metrology and Quality Engineering, vol.7, no.1, pp.104, 2016 (Scopus)

XXV. VEKTÖR GÖZLEMLERİ İLE KÜÇÜK UYDULARDA YÖNELİM BELİRLEME YÖNTEMLERİ CİLDEN D., HACIZADE C.

HAVACILIK VE UZAY TEKNOLOJİLERİ DERGİSİ, vol.7, pp.35-43, 2014 (Peer-Reviewed Journal)

XXVI. Estimation of Pico Satellite Attitude Dynamics and External Torques via Unscented Kalman Filter Soken H. E., HACIZADE C.

Journal of Aerospace Technology and Management, vol.6, no.2, pp.149-157, 2014 (Scopus)

XXVII. Data Collection System Identification of Multicopter Vehicle

Mutlu T., HACIZADE C.

Machines, Technologies, Materials International Virtual Journal, no.2, pp.51-55, 2014 (Peer-Reviewed Journal)

XXVIII. A comparison of longitudinal controllers for autonomous UAV

Vural S. Y., HACIZADE C.

International Journal of Sustainable Aviation, 2014 (ESCI)

XXIX. LQR Controller with Kalman Estimator Applied to UAV Longitudinal Dynamics

HACIZADE C., Vural S. Y.

Positioning, vol.4, no.1, pp.36-41, 2013 (Peer-Reviewed Journal)

XXX. Error analysis of orbit determination for the geostationary satellite with single station antenna tracking data

Ata M., HACIZADE C.

Positioning, 2011 (Peer-Reviewed Journal)

XXXI. Reconfigurable UKF for in-flight magnetometer calibration and attitude parameter estimation Soken H. E., HACIZADE C.

IFAC-PapersOnline, 2011 (Scopus)

XXXII. Letter to the Editor

Hajiyev C.

Aircraft Engineering and Aerospace Technology, vol.82, no.2, 2010 (Scopus)

XXXIII. Robust UKF Insensitive to Measurement Faults for Pico Satellite Attitude Estimation

Soken H. E., HACIZADE C.

World Academy of Science, Engineering and Technology, vol.68, pp.650-655, 2010 (Peer-Reviewed Journal)

XXXIV. Kalman Filter for Estimation of a Linear Regression Model with Account of the Regression Vector Error and its Application to Calibration of Measuring Instruments

Hajiyev C.

MEASUREMENT TECHNOLOGY AND INTELLIGENT INSTRUMENTS VIII, pp.557-560, 2008 (Scopus)

### **Books & Book Chapters**

I. Integration of Baro-Inertial-GPS Altimeter via Complementary Kalman Filter

Contreras A. M., HACIZADE C.

in: Advances in Sustainable Aviation, Karakoç T., Colpan C., Şöhret Y., Editor, Springer, pp.251-268, 2018

II. Gyroless Attitude Determination of Nanosatellites

CILDEN GÜLER D., HACIZADE C.

LAP LAMBERT Academic Publishing, Saarbrücken, 2017

III. Diagnosis and Fault Tolerant Control in Dynamic Systems

Shumsky A., Zhirabok A., HACIZADE C.

Far Eastern Federal University, Vladivostok, 2016

IV. Integration of Single-Frame and Filtering Methods for Nanosatellite AttitudeEstimation

Soken H. E., ÇİLDEN GÜLER D., HACIZADE C.

in: Multisensor Attitude Estimation Fundamental Concepts and Applications, Hassen Fourati, Djamel Eddine Chouaib Belkhiat, Editor, CRC Press, 2016

#### V. State Estimation and Control for Low cost Unmanned Aerial Vehicles

HACIZADE C., Soken H. E., Vural S. Y.

Springer International Publishing Switzerland, 2015

# VI. Robust Kalman Filtering with Single and Multiple Scale Factors for Small Satellite Attitude Estimation Soken H. E., HACIZADE C., Sakai S.

in: Advances in Estimation Navigation and Spacecraft Control, Choukroun, D., Oshman, Y., Thienel, J., Idan, M., Editor, Springer-Verlag Berlin Heidelberg, pp.391-411, 2015

#### VII. Aircraft icing detection, identification and reconfigurable control

Hacızade C., Çalışkan F.

Lambert, Saarbrücken, 2011

### VIII. Fault diagnosis and reconfiguration in flight control systems

HACIZADE C., ÇALIŞKAN F.

Springer Science+Business Media, 2003

## Refereed Congress / Symposium Publications in Proceedings

### I. Comparison of EKF&UKF for GNSS Based Micro Satellite Orbital State Estimation

Sever M., Erkec T. Y., Hajiyev C.

10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023

# II. Relative State Estimation for Two-Satellite Formation with Three Extented Kalman Filters Architecture using GNSS Receivers

Erkec T. Y., Hajiyev C.

10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023

# III. Development of Satellite Attitude Controller with TRIAD and Particle Swarm Optimization Using Only Magnetic Actuators

Erturk M. F., Hajiyev C.

5th International Conference on Problems of Cybernetics and Informatics, PCI 2023, Baku, Azerbaijan, 28 - 30 August 2023

### IV. Aircraft State Estimation via KF&AKF Methods

Sever M., Erkec T. Y., Hajiyev C.

10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023

# V. Multiple Fading Factors Based Adaptive SVD-aided UKF for Small Satellite Attitude Estimation Hajiyev C., Çilden Güler D.

10th International Conference on Recent Advances in Air and Space Technologies, RAST 2023, İstanbul, Turkey, 7 - 09 June 2023

#### VI. Nonlinear Two-Stage Kalman Filter for in-Orbit Calibration of Magnetometers

Hajiyev C.

5th International Conference on Problems of Cybernetics and Informatics, PCI 2023, Baku, Azerbaijan, 28 - 30 August 2023

# VII. A Model Predictive Control Based Magnetorquer-only Attitude Control Approach for a Small Satellite Eşit M., Soken H. E., HACIZADE C.

22nd IFAC International Symposium on Automatic Control in Aerospace 2022, Mumbai, India, 21 November 2022

# VIII. Non Traditional Gyro-Based EKF for Small Satellite Attitude Estimation and Sensor Bias Calibration Kinataş H., HACIZADE C.

11th Nanosatellite Symposium, İstanbul, Turkey, 17 October 2022

# IX. SVD-Aided EKF with process noise covariance adaptation applied to satellite attitude dynamics Hajiyev C., ÇİLDEN GÜLER D.

4th International Workshop on Computer Modeling and Intelligent Systems, CMIS 2021, Zaporizhzhya, Ukraine, 27 April 2021, vol.2864, pp.390-399

# X. Two stage kalman filter based fault tolerant control of uav longitudinal dynamicsagainst actuator failures

HACIZADE C., ÇALIŞKAN F.

COIA'20, 26 - 28 August 2020

# XI. Are External Magnetic Disturbances Suppressed by Magnetometer Noise when Estimating a Nanosatellite's Rotational Motion?

ÇİLDEN GÜLER D., HACIZADE C., KAYMAZ Z.

21st IFAC World Congress 2020, 11 - 17 July 2020

### XII. Assessment of Fault Tolerant Estimation for Light Utility Helicopter Dynamics

Dökme Ö., HACIZADE C.

8th Asian/Australian Rotorcraft Forum, 30 October - 02 November 2019

# XIII. Active Fault Tolerant Lateral Control Against Actuator Faults Applied to AUV Dynamics HACIZADE C., Vural S. Y.

4th Conference on Control and Fault Tolerant Systems, 18 - 20 September 2019, pp.153-158

#### XIV. Parçacık Sürü Optimizasyon Güdümü ve Performans Karşılaştırması

Turan E., HACIZADE C.

TOK'xx2019 Otomatik Kontrol Ulusal Toplantisi, Turkey, 11 - 14 September 2019, pp.398-403

# XV. Nanosatellite Attitude Estimation via Weighted Least Square Method and Error Analysis

HACIZADE C., Gökçay M. A.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.775-778

# XVI. Performance Comparison of Guidance Algorithms for Planetary Landing, Asteroid Intercept and Rendezvous

Turan E., HACIZADE C.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.915-925

# XVII. Assessment of Magnetic Storm Effects under Various Magnetometer Noise Levels for Satellite Attitude Estimation

ÇİLDEN GÜLER D., KAYMAZ Z., HACIZADE C.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.769-773

### XVIII. Data Fusion for Integrated Baro/GPS Altimeter

HACIZADE C., Hacizade U., ÇİLDEN GÜLER D.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.881-885

### XIX. Traditional Methods on Relative Navigation of Small Satellites

Erkec T. Y., HACIZADE C.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.869-874

### XX. A Comparison of Intuitive and Adaptive Approaches

Soken H. E., HACIZADE C.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.747-752

#### XXI. Measurement Conversion Based RKF for Satellite Localization via GPS

Bağci M., HACIZADE C.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.861-868

# XXII. Two-Stage Kalman Filter for Estimation of Wind Speed and UAV Flight Parameters Based on GPS/INS and Pitot Tube Measurements

HACIZADE C., ÇİLDEN GÜLER D., Hacizade U.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.875-880

XXIII. EKF for Wind Speed Estimation and Sensor Fault Detection Using Pitot Tube Measurements HACIZADE C., ÇİLDEN GÜLER D., Hacizade U.

9th International Conference on Recent Advances in Space Technologies "Space for the Sustainable Development Goals" (RAST-2019), 11 - 14 June 2019, pp.887-893

XXIV. Comparison of Conventional and Robust Adaptive Kalman Filters Based Integrated Altimeters Contreras A. M., HACIZADE C.

20th International Carpathian Control Conference, 26 - 29 May 2019

XXV. Two-Stage Kalman Filter for Estimation of Wind Speed and UAV States by using GPS, IMU and Air Data System

HACIZADE C., ÇİLDEN GÜLER D., Hacizade U.

WSEAS Conferences 2019, Lizbon, Portugal, 12 - 14 April 2019

XXVI. Tuning the Attitude Filter: A Comparison of Intuitive and Adaptive Approaches Soken H. E., Hacızade C.

9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.747-752

XXVII. Comparison of Conventional and Robust Adaptive Kalman Filters Based Integrated Altimeters Contreras A. M., Hajiyev C.

20th International Carpathian Control Conference (ICCC), Poland, 26 - 29 May 2019, pp.305-310

XXVIII. Performance Comparison of Guidance Algorithms for Asteroid Intercept

Turan E., Hajiyev C.

9th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 11 - 14 June 2019, pp.919-925

XXIX. Passive Fault Tolerant Lateral Controller Design For an UAV

Vural S. Y., DAŞDEMİR J., HACIZADE C.

18th IFAC International Conference "International Stability, Technology and Culture", 13 August - 15 September 2018

XXX. Robust Kalman Filter Based Estimation of AUV Dynamics in the Presence Of Sensor Faults HACIZADE C., Vural S. Y., Zhirabok A., Shumsky A.

18th IFAC International Conference "International Stability, Technology and Culture", 13 - 15 September 2018

XXXI. Gyroless Nanosatellite Attitude Estimation in Loss of Sun Sensor Measurements HACIZADE C., ÇİLDEN GÜLER D.

18th IFAC International Conference "International Stability, Technology and Culture", 13 - 15 September 2018

XXXII. An Innovation Approach Based Model Change Detection Applied to UAV Actuator/Surface FDI HACIZADE C.

 $18 th\ IFAC\ International\ Conference\ "International\ Stability, Technology\ and\ Culture", 13-15\ September\ 2018$ 

XXXIII. UD Factorization Based Non-Traditional Attitude Estimation of Nanosatellite with Rate Gyros FDI ÇİLDEN GÜLER D., HACIZADE C.

18th IFAC International Conference "International Stability, Technology and Culture", 13 - 15 September 2018

XXXIV. Reconfigurable Fault Tolerant Flight Control for UAV with Pseudo-Inverse Technique Mammadov H., HACIZADE C.

18th IFAC International Conference "International Stability, Technology and Culture", 13 - 15 September 2018

XXXV. Fault tolerant estimation of light utility helicopter dynamics against sensor faults Dökme Ö., HACIZADE C.

International Eurasian Conference on Science, Engineering and Technology, 22 - 23 November 2018

XXXVI. Robust Kalman Filter Based Estimation of AUV Dynamics in the Presence Of Sensor Faults Hajiyev C., Vural S. Y., Shumsky A., Zhirabok A.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.424-429

XXXVII. Gyroless Nanosatellite Attitude Estimation in Loss of Sun Sensor Measurements

Hajiyev C., Çilden Güler D.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.89-94

XXXVIII. An Innovation Approach Based Model Change Detection Applied to UAV Actuator/Surface FDI Hajiyev C.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.77-82

XXXIX. Passive Fault Tolerant Lateral Controller Design For an UAV

Vural S. Y., DAŞDEMİR J., Hajiyev C.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.446-451

XL. Reconfigurable Fault Tolerant Flight Control for UAV with Pseudo-Inverse Technique Mammadov H., Hajiyev C.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.83-88

XLI. UD Factorization Based Non-Traditional Attitude Estimation of Nanosatellite with Rate Gyros FDI Çilden Güler D., Hajiyev C.

18th International-Federation-of-Automatic-Control (IFAC) Conference on Technology, Culture and International Stability (TECIS), Baku, Azerbaijan, 13 - 15 September 2018, vol.51, pp.95-100

XLII. Attitude Estimation of Small Satellites in Consideration of Geomagnetic Field Anomalies ÇİLDEN GÜLER D., KAYMAZ Z., HACIZADE C.

42nd COSPAR Scientific Assembly, Pasadena, California, United States Of America, 14 - 22 July 2018

XLIII. Attitude Estimation by SVD/EKF using Reformed Measurements and Decomposed Noise Covariance ÇİLDEN GÜLER D., HACIZADE C.

9th International Conference on Mechanical and Aerospace Engineering, 10 - 13 July 2018

XLIV. Test Platform for Small Satellite Attitude Determination and Control System Kutlu A., ÇİLDEN GÜLER D., HACIZADE C.

9th International Conference on Mechanical and Aerospace Engineering, 10 - 13 July 2018

XLV. Kalman Filter Based Sensor Fault Detection And Isolation Algorithms Applied To Helicopter Dynamics

Dökme Ö., HACIZADE C.

International Conference on Mathematics and Mathematics Education, 27 - 29 June 2018

XLVI. Reconfigurable Kalman Filter For Estimation Of Helicopter Flight Dynamics Dökme Ö., HACIZADE C.

International Conference on Mathematics and Mathematics Education, 27 - 29 June 2018

XLVII. Q-Adaptation of UKF Algorithm for Estimation of the Autonomous Underwater Vehicles Dynamics HACIZADE C., Soken H. E.

Proceedings of the 5th International Conference of Control, Dynamic Systems, and Robotics (CDSR'xx18), Niagara Falls, 7 June - 09 March 2018

XLVIII. Satellite Guidance and Control During OperativeOptoelectronic Imagery for Disaster Management Somov Y., HACIZADE C.

The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, 18 - 21 March 2018, pp.475

XLIX. Attitude and Rate Estimation for Nanosatellite from Vector Measurements Using SVD-Aided UKF Algorithm

ÇİLDEN GÜLER D., Soken H. E., HACIZADE C.

4th International Conference on Aeronautical and Mechanical Engineering (AEME 'xx17), 15 - 17 December 2017

L. Kalman Filter Based Loosely-Coupled GPS/INS Integration for Boeing-747 Aircraft Model Kamiloglu D. B., HACIZADE C.

9th Ankara International Aerospace Conference, 20 - 22 September 2017

#### LI. Attitude determination of nanosatellites in the sun-eclipse phases

Hajiyev C., Çilden Güler D., Somov Y.

8th International Conference on Recent Advances in Space Technologies, RAST 2017, İstanbul, Turkey, 19 - 22 June 2017, pp.397-401

#### LII. Q-Adaptation of SVD-aided UKF Algorithm for Nanosatellite Attitude Estimation

HACIZADE C., HALIL ERSIN S., ÇİLDEN GÜLER D.

The 20th World Congress of the International Federation of Automatic Control, Toulouse, France, 9 - 14 July 2017

# LIII. Integrated SVD/EKF for Nano-satellite AttitudeDetermination in case of Magnetometer Faults CİLDEN GÜLER D., HACIZADE C.

7TH EUROPEAN CONFERENCE FOR AERONAUTICS AND SPACE SCIENCES (EUCASS)Copyright 🛽, Milan, Italy, 3 - 06

#### LIV. Fault Tolerant Integrated Barometric-Inertial-GPS Altimeter

Contreras A., HACIZADE C.

July 2017

7th European Conference for Aeronautics and Space Sciences (EUCASS), 3 - 06 July 2017

# LV. Integrated SVD/EKF Attitude Estimation with UDFactorization of the Measurement Noise Covariance ÇİLDEN GÜLER D., HACIZADE C.

8th International Conference on Recent Advances in Space Technologies - RAST 2017, 19 - 22 June 2017

#### .VI. Fault Tolerant Control of Attitude Dynamics of Nanosatellites

ÇİLDEN GÜLER D., HACIZADE C., DAŞDEMİR J.

8th International Conference on Recent Advances in Space Technologies - RAST 2017, 19 - 22 June 2017

#### LVII. Attitude Determination of Nanosatellitesin the Sun-Eclipse Phases

HACIZADE C., ÇİLDEN GÜLER D., SOMOV Y.

8th International Conference on Recent Advances in Space Technologies - RAST 2017, 19 - 22 June 2017

### LVIII. Geomagnetic Models at Low Earth Orbit and Their Use in Attitude Determination

ÇİLDEN GÜLER D., KAYMAZ Z., HACIZADE C.

8th International Conference on Recent Advances in Space Technologies - RAST 2017, 19 - 22 June 2017

# LIX. Nontraditional UKF Based Nanosatellite AttitudeEstimation with the Process and MeasurementNoise Covariances Adaptation

ÇİLDEN GÜLER D., SOKEN H. E., HACIZADE C.

8th International Conference on Recent Advances in Space Technologies - RAST 2017, 19 - 22 June 2017

# LX. Comparison of Linear and Nonlinear Measurements Based Orbit Estimation EKFs

Bağci M., HACIZADE C.

8th International Conference on Recent Advances in Space Technologies (RAST-2017), 19 - 22 June 2017

### LXI. Precise Astroinertial Attitude Determination of a Maneuvering Land-survey Satellite

Somov Y., Butyrin S., Somov S., HACIZADE C.

8th International Conference on Recent Advances in Space Technologies (RAST-2017), 19 - 22 June 2017

#### LXII. Non-Traditional Robust UKF against Attitude Sensors Faults

ÇİLDEN GÜLER D., SOKEN H. E., HACIZADE C.

31st International Symposium on Space Technology and Science (ISTS), 3 - 09 June 2017

#### LXIII. Fault Tolerant Control of Attitude Dynamics of Nanosatellites

Çilden Güler D., Hajiyev C., DAŞDEMİR J.

8th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 19 - 22 June 2017, pp.349-353

### LXIV. Reconfigurable Fault Tolerant UAV Flight Control Against Actuator Faults

HACIZADE C.

Australian Control Conference, Sidney, Australia, 3 - 04 November 2016, pp.323-328

### LXV. Uydunun Dönme Hareketinin Arıza Toleranslı Kontrolü

ÇİLDEN GÜLER D., DAŞDEMİR J., HACIZADE C.

Otomatik Kontrol Ulusal Toplantısı (TOK), Turkey, 29 September - 01 October 2016

# LXVI. Measurement Differencing Approach Based Kalman Filter Applied To INS Error Compensation

Hajiyev C.

20th IFAC Symposium on Automatic Control in Aerospace (ACA), Sherbrooke, Canada, 21 - 25 August 2016, vol.49, pp.343-348

LXVII. An Innovation Approach Based Sensor Fault Detection and Isolation

Hajiyev C.

20th IFAC Symposium on Automatic Control in Aerospace (ACA), Sherbrooke, Canada, 21 - 25 August 2016, vol.49, pp.420-425

LXVIII. An Innovation Approach Based Sensor Fault Detection and Isolation

HACIZADE C.

20th IFAC Symposium on Automatic Control in Aerospace, Sherbrooke, Canada, 21 - 25 August 2016

LXIX. Measurement Differencing Approach Based Kalman Filter Applied to INS Error Compensation HACIZADE C.

20th IFAC Symposium on Automatic Control in Aerospace, Sherbrooke, Sherbrooke, Canada, 21 - 25 August 2016

LXX. In-flight Management for Attitude Control System with Animation of Satellite Motion

Somov Y., Butyrin S., Somov S., Somova T., Hajiyev C., Sukhanov V.

8th IFAC Conference on Manufacturing Modelling, Management and Control (MIM), Troyes, France, 28 - 30 June 2016, vol.49, pp.833-838

LXXI. Integrated NRM EKF for LEO Satellite GPS Based Orbit Determination

Bagci M., HACIZADE C.

3rd IEEE International Workshop on Metrology for Aerospace. Florence, Florence, Italy, 21 - 23 June 2016, pp.466-471

LXXII. Estimation of UAV Dynamics Using Two Stage Kalman Filter

Vural S. Y., HACIZADE C.

International Symposium On Sustainable Aviation, İstanbul, Turkey, 29 May - 01 June 2016, pp.418-421

LXXIII. Integrated Barometric Inertial GPS Altimeter

Maero Contreras A., HACIZADE C.

International Symposium on Sustainable Aviation, İstanbul, Turkey, 29 May - 01 June 2016, pp.386-389

LXXIV. In flight Management for Attitude Control System with Animation of Satellite Motion

Somov Y., Butyrin S., Somov S., Somova T., Sukhanov V., HACIZADE C.

IFAC Conference on Manufacturing Modelling, Management and Control, Troyes, France, 28 - 30 May 2016, pp.872-877

LXXV. Attitude Determination and Uncertainty Analysis in Eclipse of Small LEO Satellites

ÇİLDEN GÜLER D., HACIZADE C.

SIAM Conference on Uncertainty Quantification, 5 - 08 April 2016

LXXVI. Nontraditional Approach to Satellite Attitude Estimation

HACIZADE C., ÇİLDEN GÜLER D.

16th International Conference on Robotics, Control And Manufacturing Technology (ROCOM '16), 18 - 20 March 2016

LXXVII. Sensor eyleyici arızalarına karşı insansız hava aracının yeniden şekillendirilebilir kontrolü

ÇALIŞKAN F., HACIZADE C.
Otomatik Kontrol Ulusal Toplantısı, TOK'2015, Turkey, 10 - 12 September 2015, pp.206-211

LXXVIII. Sensor Fault Detection by Testing the Generalized Variance of the Innovation Covariance

HACIZADE C., Hacizade U.

XXI IMEKO World Congress, Czech Republic, 30 August - 04 September 2015, pp.1181-1186

LXXIX. In Orbit Magnetometer Calibration Based on Linear Kalman Filtering

HACIZADE C.

XXI IMEKO World Congress, Czech Republic, 30 August - 04 September 2015, pp.1944-1949

LXXX. Low cost attitude determination system for a LEO information mini-satellite

Somov Y., Butyrin S., Somov S., Hajiyev C.

7th International Conference on Recent Advances in Space Technologies, RAST 2015, İstanbul, Turkey, 16 - 19 June 2015, pp.725-730

LXXXI. Error Analysis of the Vector Measurements Based Attitude Determination Methods for Small

#### **Satellites**

ÇİLDEN D., HACIZADE C.

30th International Symposium on Space Technology and Science (ISTS), Kobe-Hyogo, Japan, 4 - 10 July 2015

LXXXII. Attitude Estimation for Nanosatellites Using Singular Value Decomposition and Unscented Kalman Filter

CİLDEN D., HACIZADE C.

30th International Symposium on Space Technology and Science (ISTS), Kobe-Hyogo, Japan, 4 - 10 July 2015

 $LXXXIII. \quad \textbf{Integrated SVD EKF for Small Satellite Attitude and Rate Estimation} \\$ 

HACIZADE C., ÇİLDEN D.

6th European Conference for Aeronautics and Space Sciences (EUCASS), 29 June - 02 July 2015

LXXXIV. Covariance Analysis of Three-Axis Attitude Determination Using Two Vector Measurements Cilden D., CONGUROGLU E. S., Hajiyev C.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.701-706

LXXXV. Comparison of Geomagnetic Field from Models and Satellite Observations for Attitude Determination Purposes

Cilden D., Kaymaz Z., Hajiyev C.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.483-487

LXXXVI. Extraterrestial Magnetic Field Effects on Attitude Determination Accuracy of Small Satellites Cilden D., Kaymaz Z., Hajiyev C.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.707-711

LXXXVII. Attitude and Attitude Rate Estimation for a Nanosatellite Using SVD and UKF

Cilden D., Hajiyev C., Soken H. E.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.695-700

LXXXVIII. Performance Analysis of GPS Based Orbit Determination via Numerical Methods for a LEO Satellite Bagci M., Hacızade C.

7th International Conference on Recent Advances in Space Technologies (RAST), İstanbul, Turkey, 16 - 19 June 2015, pp.731-735

LXXXIX. Unscented Kalman Filter based two stage estimation of spacecraft position and velocity with single station antenna tracking data

HACIZADE C., Ata M.

2015 7th International Conference on Recent Advances in Space Technologies (RAST), Istanbul, Turkey, 16 - 19 June 2015

XC. Integration of Algebraic Method and EKF for Attitude Determination of Small Information Satellites HACIZADE C., Conguroglu E. S.

7th International Conference on Recent Advances in Space Technologies, 16 - 19 June 2015, pp.719-724

XCI. Reconfigurable control of an UAV against sensor/actuator failures

Çalışkan F., hajiyev C.

1st IFAC Workshop on Advanced Control and Navigation for Autonomous Aerospace Vehicles, ACNAAV 2015, Sevilla, Spain, 10 - 12 June 2015, vol.28, pp.7-12

XCII. Integrated SVD EKF for Small Satellite Attitude Determination and Rate Gyro Bias Estimation HACIZADE C., ÇİLDEN D., SOMOV Y.

2015 IFAC Workshop on Advanced Control and Navigation for Autonomous Aerospace Vehicles, Sevilla, Spain, 10 - 12 June 2015

XCIII. Attitude Guidance Navigation and Control of Land survey Mini satellites

Somov Y., Butyrin S., Somov S., HACIZADE C.

2015 IFAC Workshop on Advanced Control and Navigation for Autonomous Aerospace Vehicles, Spain, 10 - 12 June 2015, pp.222-227

XCIV. Fault Detection Isolation and Accommodation in Flight Control System of A340 Airbus Aircraft Balague G. T., HACIZADE C.

International Symposium on Sustainable Aviation, 31 May - 03 June 2015, pp.44-47

XCV. Robust Estimation of F 16 Fighter Dynamics in Presence of Sensor Faults

Burcet J. C., HACIZADE C.

The First International Symposium on Sustainable Aviation, 31 May - 03 June 2015, pp.40-43

XCVI. Gyroless Attitude and Rate Estimation of Small Satellites Using Singular Value Decomposition and Extended Kalman Filter

Hajiyev C., Cilden D., Somov Y.

16th International Carpathian Control Conference (ICCC), Miskolc, Hungary, 27 - 30 May 2015, pp.159-164

XCVII. Guidance and Precise Motion Control of Free-flying Robots and Land-survey Mini-satellites Somov Y., Sukhanov V., Hacizade C.

13th International Conference on Control Automation Robotics & Vision (ICARCV), Singapore, Singapore, 10 - 12 December 2014, pp.1092-1097

XCVIII. KÜÇÜK UYDULARDA İKİLİ VE ÜÇLÜ VEKTÖR GÖZLEMLERİ İLE YÖNELİMİN BELİRLENMESİ ÇİLDEN D., HACIZADE C.

V. ULUSAL HAVACILIK VE UZAY KONFERANSI, Kayseri, Turkey, 8 - 10 September 2014

XCIX. Simultaneous adaptation of the process and measurement noise covariances for the UKF applied to nanosatellite attitude estimation

Soken H. E., HACIZADE C., Sakai S.

19th World Congress The International Federation of Automatic Control, 24 August 2014

C. Signal Processing and Calibration of Low-cost Strap-down Inertial Navigation System for Landsurvey Mini-satellite

Somov Y., Butyrin S., Hajiyev C.

10th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences (ICNPAA), Narvik, Norway, 15 - 18 July 2014, vol.1637, pp.1028-1037

CI. In-Flight Detection and Identification and Accommodation of Aircraft Icing

Çalışkan F., Hajiyev C.

9th International Conference on Mathematical Problems in Engineering, Aerospace and Sciences, Vienna, Austria, 10 - 14 July 2012, vol.1493, pp.200-206

CII. Yersabit Yörünge Uydusunun Tek Anten Ölçüm Verisi ile Yörüngesinin Belirlenmesinin Hata Analizi HACIZADE C., Ata M.

Ulusal Havacılık ve Uzay Konferansı (UHUK-2012), Turkey, 12 - 14 July 2012

CIII. İHA Hava Verileri Sisteminde Arıza Tespiti Ayıklanması ve Tümleştirilmiş Süzme HACIZADE C., Vural S. Y.

Ulusal Havacılık ve Uzay Konferansı (UHUK-2012), Turkey, 12 - 14 July 2012

CIV. In flight detection and identification and accommodation of aircraft icing

Caliskan F., HACIZADE C.

9TH INTERNATIONAL AIP CONFERENCE, Austria, 10 July 2012

CV. A novel adaptive unscented Kalman filter for pico satellite attitude estimationHE Soken Soken H. E., HACIZADE C.

PHYSCON, 2011, 5 - 08 September 2011

CVI. ITU-pSAT II: High-precision nanosatellite ADCS development project

Koyuncu E., Baskaya E., Cihan M., Isiksal S., Fidanoglu M., Akay C., Cetin A., Karadag B., Kaya Y., Karyot B., et al. 5th International Conference on Recent Advances in Space Technologies, RAST 2011, İstanbul, Turkey, 9 - 11 June 2011, pp.500-505

CVII. Reconfigurable UKF for In Flight Magnetometer Calibration and Attitude Parameter Estimation Soken H. E., HACIZADE C.

18th IFAC World Congress, Italy, 28 August - 02 September 2011, pp.741-746

CVIII. Smart Reconfigurable Fault Tolerant Flight Control Against Actuator Failures HACIZADE C.

18th IFAC World Congress, 28 August - 02 September 2011, pp.3009-3014

CIX. In flight magnetometer calibration via unscented Kalman filter

Soken H. E., HACIZADE C.

Proceedings of 5th International Conference on Recent Advances in Space Technologies - RAST2011, Istanbul, Turkey, 9 - 11 June 2011

CX. REKF and RUKF Development for Pico Satellite Attitude Estimation in the Presence of Measurement Faults

Soken H. E., HACIZADE C.

5th International Conference on Recent Advances in Space Technologies, 9 - 11 June 2011, pp.891-896

CXI. Development of Autonomous Underwater Vehicle NavigationSystem Based on Kalman Filtering Technique

Dinç M., HACIZADE C.

18th St.Petersburg International Conference on Integrated Navigation Systems (ICINS- 2011), 30 May - 01 June 2011, pp.238-242

CXII. Development of Integrated INS GPS Navigation System for Unmanned Air Vehicle Based on Kalman Filtering Technique

Dinc M., Anlı E., HACIZADE C., Ozkol I.

5th International Conference on Recent Advances in Space Technologies, 9 - 11 June 2011

CXIII. Nonlinear Robust Adaptive EKF for Identification of EMAs Parameters in the Presence of Sensor Faults

HACIZADE C.

5th International Scientific Conference on Physics and Control (PhysCon 2011), Spain, 5 - 08 September 2011

CXIV. Observer Based Fault Diagnosis in Thrusters of Autonomous Underwater Vehicle

Shumsky A., Zhirabok A., Hajiyev C.

Conference on Control and Fault-Tolerant Systems (SysTol), Nice, France, 6 - 08 October 2010, pp.11-16

CXV. Manyetometre Ölçümlerine Göre Küçük Uydu Yönelim Dinamiğinin Genişletilmiş Kalman Süzgeci Temelli Kestirimi İTÜpSAT II Projesi

Başkaya E., HACIZADE C., İnalhan G.

III. Ulusal Havacılık ve Uzay Konferansı (UHUK-2010), 16 - 18 September 2010

CXVI. Adaptive Robust Estimation of the Electro Mechanical Actuator Parameters in the Presence of Sensor Faults

HACIZADE C., Hajiyeva U.

Sixth International Conference on Technical and Physical Problems of Power Engineering (ICTPE-2010), 14 - 16 September 2010, pp.122-126

CXVII. Sensor Fault Detection by Testing the Largest Eigenvalue of the Innovation Covariance Using Tracy
Widom Distribution

HACIZADE C.

 $2010\ American\ Control\ Conference, 30\ June\ -\ 02\ July\ 2010, pp.5427-5432$ 

CXVIII. LQR Controller With Kalman Estimator Applied To UAV Longitudinal Dynamics

Vural S. Y., HACIZADE C.

International Workshop on Unmanned Vehicles -UVW2010, 10 - 12 June 2010, pp.162-166

CXIX. Development of Autonomous Underwater Vehicle Navigation System Based on Kalman Filtering Technique

Dinc M., HACIZADE C.

 $International\ Workshop\ on\ Unmanned\ Vehicles\ -UVW2010,\ 10\ -\ 12\ June\ 2010$ 

CXX. An Adaptive Sensor Fusion Method Applied to UAV Dynamics

Soken H. E., HACIZADE C.

International Workshop on Unmanned Vehicles -UVW2010, 10 - 12 June 2010, pp.57-62

CXXI. UKF Based In Flight Calibration of Magnetometers and Rate Gyros for Pico Satellite Attitude
Determination

Soken H. E., HACIZADE C.

17th Saint Petersburg International Conference On Integrated Navigation Systems, Russia, 31 May - 02 June 2010, pp.233-240

#### CXXII. Attitude Determination and Control of Future Small Satellites

Soken H. E., Aslan R., HACIZADE C.

NATO Workshop AVT-171 "Multifunctional Structures and System Technologies for Small Spacecraft", 12 - 15 April 2010

#### CXXIII. Design and Comparison of Controllers for the Lateral Motion of Autonomus UAV

Vural S. Y., HACIZADE C.

International Symposium on Engineering and Architectural Sciences of Balkan, Caucasus and Turkic Republics, 22 - 24 October 2009, pp.136-141

### CXXIV. Adaptive Fading Kalman Filters with UAV Flight Control System Applications

HACIZADE C., Soken H. E.

International Symposium on Engineering and Architectural Sciences of Balkan, Caucasus and Turkic Republics, 22 - 24 October 2009, pp.58-64

# CXXV. An adaptive unscented Kalman filter applied for the identification of attitude dynamics parameters of a pico satellite

Soken H. E., HACIZADE C.

6th IFAC Int. Workshop Knowledge Technol. Transfer Developing Countries: Automation and Infrastructure-DECOM-09, Macedonia, 26 - 29 September 2009, pp.335-340

## CXXVI. Design and Comparison of Controllers for the Longitudinal Motion of the UAV

Vural S. Y., HACIZADE C.

5th Ankara International Aerospace Conference, 17 - 19 August 2009

### CXXVII. Adaptive Kalman Filter with Multiple Fading Factors for UAV State Estimation

HACIZADE C., Soken H. E.

7th IFAC International Symposium on Fault Detection, Supervision and Safety of Technical Processes (SAFEPROCESS-2009), 30 June - 03 July 2009, pp.77-82

# CXXVIII. Adaptive Kalman Filter with the Filter Gain Correction Applied to UAV Flight Dynamics HACIZADE C., Soken H. E.

17th Mediterranean Conference on Control and Automation. Thessaloniki, Greece, 24 - 26 June 2009

# CXXIX. Adaptive Kalman Filter with the Filter Gain Correction Applied to UAV Flight Dynamics

HACIZADE C., Soken H. E.

17th Mediterranean Conference on Control and Automation, 24 - 26 June 2009

# CXXX. UKF for the Identification of the Pico Satellite Attitude Dynamics Parameters and the External Torques on IMU and Magnetometer Measurements

Soken H. E., Hajiyev C.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.547-552

# CXXXI. Adaptive Unscented Kalman Filter with Multiple Fading Factors for Pico Satellite Attitude Estimation Soken H. E., Hajiyev C.

4th International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 11 - 13 June 2009, pp.541-546

## CXXXII. UKF for the Identification of the Pico Satellite Attitude Dynamics Parameters and the

### ExternalTorques on IMU and Magnetometer Measurements

Soken H. E., HACIZADE C.

4th International Conference on Recent Advances in Space Technologies (RAST 2009), 11 - 13 June 2009, pp.547-552

# CXXXIII. Testing the covariance matrix of the innovation sequence in application to aircraft sensor fault det Hajiyev C.

17th World Congress, International Federation of Automatic Control, IFAC, Seoul, South Korea, 6 - 11 July 2008, vol.17

## CXXXIV. İTÜ- PSAT I: Istanbul technical university student pico-satellite program

Kurtuluş C., Baltaci T., Ulusoy M., Aydin B. T., Tutkun B., Inalhan G., Çetiner-Yildirim N. L. O., Karyot T. B., Yarim C., Edis F. O., et al.

3rd International Conference on Recent Advances in Space Technologies, RAST 2007, İstanbul, Turkey, 14 - 16 June 2007, pp.725-732

CXXXV. Attitude Determination and Rotational Motion Parameters Identification of a LEO Satellite Through Magnetometer and Sun Sensor Data

Kutlu A., HACIZADE C., TEKİNALP O.

2007 3rd International Conference on Recent Advances in Space Technologies, Istanbul, Turkey, 14 - 16 June 2007

CXXXVI. Modification of a low-cost gps receiver and improvement of position data

Mutlu T., Hajiyev C.

3rd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 14 - 16 June 2007, pp.630-631

CXXXVII. Kalman filter innovation sequence based fault detection in LEO satellite attitude determination and control system

Okatan A., Hajiyev C., Hajiyeva U.

3rd International Conference on Recent Advances in Space Technologies, İstanbul, Turkey, 14 - 16 June 2007, pp.411-412

CXXXVIII. ITU pSAT I Istanbul Technical University Student Pico Satellite Program

KURTULUS C., BALTACI T., ULUSOY M., AYDIN B. T., TUTKUN B., İNALHAN G., ÇETİNER YILDIRIM N. L. O., KARYOT T. B., YARIM C., EDİS F. O., et al.

Recent Advances in Space Technologies, 2007, 14 - 16 June 2007

CXXXIX. Aircraft icing detection identification and reconfigurable control based on Kalman filtering and neural networks

AYKAN R., HACIZADE C., ÇALIŞKAN F.

AIAA Atmospheric Flight Mechanics Conference and Exhibit 2005, San-Francisco, Costa Rica, 15 - 17 August 2005

CXL. Development of GPS Aided INS via Federated Kalman Filter

HACIZADE C., Tutucu A.

Recent Advances in Space Technologies, 20 - 22 November 2003

CXLI. **EKF** based surface fault detection and reconfiguration in aircraft control systems CALISKAN F., HACIZADE C.

American Control Conference, 28 - 30 June 2000

CXLII. EKF based surface fault detection and reconfiguration in aircraft control systems

Caliskan F., Hajiyev C.

2000 American Control Conference (ACC 2000), Illinois, United States Of America, 28 - 30 June 2000, pp.1220-

CXLIII. Aircraft sensor fault diagnosis based on kalman filter innovation sequence

Caliskan F., HACIZADE C.

 $37 th \ IEEE \ Conference \ on \ Decision \ and \ Control, \ United \ States \ Of \ America, \ 18 \ December \ 1998$ 

CXLIV. Aircraft sensor fault diagnosis based on Kalman filter innovation sequence ÇALIŞKAN F., HACIZADE C.

37th IEEE Conference on Decision and Control, 16 - 18 December 1998

CXLV. Fault Detection in Flight Control Systems via Innovation Sequence of Kalman Filter HACIZADE C., Caliskan F.

UKACC International Conference on CONTROL'98, 1 - 04 September 1998, vol.455, pp.1528-1533

CXLVI. Fault detection in flight control systems via innovation sequence of Kalman filter Hajiyev C., Caliskan F.

UKACC International Conference on Control 98, Swansea, United Kingdom, 1 - 04 September 1998, pp.1528-1533

Hacızade C., Project Supported by Higher Education Institutions, Eyleyici Arızalarına Karşı İnsansız Hava Aracının Yeniden Şekillendirilebilir Arıza Toleranslı Uçuş Kontrolü, 2016 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Ölçüm Farkı Yaklaşımına Dayalı Kalman Süzgeci ve Ataletsel Seyrüsefer Sistemine Uygulanması, 2016 - 2018

Hacızade C., Project Supported by Higher Education Institutions, İNOVASYON KOVARYANSIN GENELLEŞTİRİLMİL VARYANSININ TEST DEİLMESİNE DAYALI SENSOR ARIZA TESPİTİ, 2015 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Nanouydu Yönelim Kestirimine Uygulanan UKF için Süreç ve ölçüm Bozuntu Kovaryanslarının Eşzamanlı Adaptasyonu, 2014 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Tek Anten İstasyonu İzleme Verilerine Göre Uzay Aracının Konumunun ve Hızının iki Aşamalı Kestirimi, 2013 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Genelleştirilmiş Rayleigh Quotient'i Tabanlı Sensör/Eyleyici Arıza Tespiti, 2012 - 2018

Hacızade C., Project Supported by Higher Education Institutions, ÖZEL KESİRLİ KONSANTRİK SARGILI DEĞİŞİK DİŞ KALINLIKLI FIRÇASIZ DOĞRU AKIM MOTORUNUN TASARIMI ANALİZİ VE UYGULANMASI, 2011 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Eyleyici Arızalarına Karşı Çevik Yeniden Şekillenebilir Arıza Toleranslı Uçuş Kontrolü, 2011 - 2018

Hacızade C., Project Supported by Higher Education Institutions, TAŞIT VE YENİLENEBİLİR ENERJİ DEPOLAMA AKÜLERİNİN AKTİF ÖMÜRLERİNİN UZATILMASI VE ÇEVRESEL ZARARLARININ EN AZA İNDİLİRMESİ, 2010 - 2018 Hacızade C., Project Supported by Higher Education Institutions, TRACY-WİDOM DAĞILIMI İLE İNNOVASYON KOVARYASININ EN BÜYÜK ÖZ DEĞERİNİN TEST EDİLEMSİNE DAYALI SENSÖR ARIZA TEŞHİSİ, 2010 - 2018 Hacızade C., Project Supported by Higher Education Institutions, İHA Durum Kestirimi için Çoğul Zayıflatıcı Faktörlü Uyarlamalı Kalman Süzgeci, 2009 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Uçak Sensör Arıza Teşhisine Uygulamalı Olarak İnnovasyon Sürecin Kovaryans Matrisinin Test Edilmesi, 2008 - 2018

Hacızade C., Project Supported by Higher Education Institutions, Regresyon Vektör Hatası Göz Önüne Alınarak Doğrusal Regresyon Modelinin Tahmini için Kalman Süzgeci ve Ölçme Cihazlarının Kalibrasyonuna Uygulanması, 2007 - 2018 Hacızade C., Project Supported by Higher Education Institutions, Tümleştirilmiş ANS/Radar Altimetresine Uygulamalı Filtre Kazancı Düzeltilen Adaptif Filtreleme Algoritması, 2006 - 2018

Hacızade C., TÜBİTAK International Bilateral Joint Cooperation Program Project, Küçük Enformasyon Uydularının Tümleştirilmiş Yönelme Belirleme Sistemleri Yörüngede Sensor Kalibrasyonu Uzun Süreli Güdüm ve Arıza Toleranslı Yönelme Kontrolü için Yöntemler ve Algoritmalar Geliştirilmesi, 2014 - 2016

Hacızade C., Project Supported by Higher Education Institutions, Sistem Tanılama ve Tümleşik Seyrüsefer Yöntemleri ile Rotorlu IHA nın Otonom Uçuş Kontrol Sisteminin Geliştirlmesi, 2011 - 2016

Hacızade C., Project Supported by Higher Education Institutions, İTÜ GÜNEŞ ARABASI TAHRİK SİSTEMİ GELİŞTİRLMESİ, 2009 - 2010

Hacızade C., Project Supported by Higher Education Institutions, Bir Piko Uydunun Yönelme Belirleme ve Kontrol Sisteminin Adaptif Kalman Sözgeci Temelinde Geliştirilmesi, 2009 - 2010

#### **Metrics**

Publication: 355 Citation (WoS): 842 Citation (Scopus): 1604 H-Index (WoS): 16 H-Index (Scopus): 21

#### **Invited Talks**

International Symposium on Electric Aircraft and Autonomous Systems, Conference, Institute of Aviation, Warsaw

University of Technology and Air Force Institute of Technology, Poland, July 2023

Interna®onal Symposium on Unmanned Systems: AI, Design and Efficiency, Conference, KTH Royal Institute of Technology, Sweden, June 2023

International Symposium on Sustainable Aviation, Conference, RMIT University, Australia, August 2022

Interna@onal Symposium on Electric Avia@on and Autonomous Systems, Conference, University of Maribor, Slovenia, July 2022

Interna@onal Symposium on Electric Aircra@ and Autonomous System 2021, Conference, Eskişehir Teknik Üniversitesi, Turkey, December 2021

Mathematical Models in Engineering and Systems, Conference, WSEAS, Portugal, April 2019

Aeronautical and Mechanical Engineering, Conference, WSEAS, Italy, December 2017

Sürdürülebilir Havacılık Araştırmaları, Workshop, GEBZE TEKNİK ÜNİVERSİTESİ, Turkey, April 2017

16th International Conference on Robotics, Control and Manufacturing Technology, Conference, WSEAS, Czech Republic, March 2016