

Asst. Prof. Akif Yavuz

Personal Information

Email: yavuza15@itu.edu.tr

Web: <https://adl.itu.edu.tr>

Education Information

Doctorate, Istanbul Technical University, Lisansüstü Eğitim Enstitüsü, Turkey 2017 - 2023

Postgraduate, Istanbul Technical University, Makine Fakültesi , Makine Mühendisliği, Turkey 2015 - 2017

Foreign Languages

English, B2 Upper Intermediate

Certificates, Courses and Trainings

Measurement and Evaluation, Taşıt Akustiği, OTAM, 2017

Education Management and Planning, CATIA, TMMOB, 2015

Dissertations

Postgraduate, Taşıt koltuklarının titreşim konforu açısından değerlendirilmesi, İstanbul Teknik Üniversitesi, Makine Fakültesi, Makine Mühendisliği, 2017

Research Areas

Machine Theory and Dynamics, Machine Dynamics, Vehicle Systems Dynamics, Acoustics and Noise Control, Modeling and Simulation of Dynamic Systems, Mechanical Vibrations

Academic Titles / Tasks

Assistant Professor, Istanbul Technical University, Makina, Makina Mühendisliği, 2024 - Continues

Research Assistant, Istanbul Technical University, Makina, Makina Mühendisliği, 2016 - 2024

Research Assistant, Bogazici University, 2014 - 2015

Published journal articles indexed by SCI, SSCI, and AHCI

- I. DEVELOPMENT AND PERFORMANCE ASSESSMENT OF DIFFERENT SQUEAL INDEX METRICS BASED ON EXPERIMENTAL DATA**

Yavuz A., Şen O. T.

PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS, PART D: JOURNAL OF AUTOMOBILE ENGINEERING, vol.1, no.1, pp.1-20, 2024 (SCI-Expanded)

- II. **Feasibility of Using a Mobile Device to Identify the Axle Whine Noise in a Vehicle**
Rahtuvan G. B., Yavuz A., Şen O. T.
International Journal of Acoustics and Vibrations, vol.28, no.2, pp.139-146, 2023 (SCI-Expanded)
- III. **Stability Analysis of a Mass-Sliding Belt System and Experimental Validation as Motivated by the Brake Squeal Problem**
Yavuz A.
Journal of Vibration Engineering Technologies , vol.1, pp.1-20, 2023 (SCI-Expanded)
- IV. **Assessment of fuzzy logic approach for the prediction of dynamic stability on a mass-sliding belt experiment**
Yavuz A., Sen O. T.
JOURNAL OF INTELLIGENT AND FUZZY SYSTEMS, vol.1, pp.1-16, 2023 (SCI-Expanded)
- V. **INVESTIGATION OF THE PAD STIFFNESS EFFECTS ON THE INITIATION OF BRAKE SQUEAL PHENOMENON**
Yavuz A., Sen O. T.
Journal of Theoretical and Applied Mechanics (Poland), vol.61, no.2, pp.219-232, 2023 (SCI-Expanded)
- VI. **Comparison and investigation of inverse identification techniques for the material properties of a brake disc through experimental and numerical modal analysis**
BALCI Ö., Yavuz A., ÖZKAN M., Şen O. T.
PROCEEDINGS OF THE INSTITUTION OF MECHANICAL ENGINEERS PART C-JOURNAL OF MECHANICAL ENGINEERING SCIENCE, vol.236, no.20, pp.10395-10412, 2022 (SCI-Expanded)

Articles Published in Other Journals

- I. **Vehicle noise pollution awareness for human health and environmental impacts: A comprehensive review**
Yavuz A., Yavuz A. N., Hacibektaşoğlu S. E.
ACTA PHARMACEUTICA SCIENTIA, vol.62, no.3, pp.1-20, 2024 (ESCI)
- II. **Evaluation of Road Roughness and Vehicle Speed Effects on Vibration Comfort of School Bus Driver Seats following the ISO 2631-1 Standard and Occupational Health and Safety Legislation**
Yavuz A., Hacibektaşoğlu S. E.
Bitlis Eren Üniversitesi Fen Bilimleri Dergisi, vol.12, no.4, pp.1171-1184, 2023 (Peer-Reviewed Journal)
- III. **Evaluation of Whole Body Vibration Exposures for Vehicle Drivers in terms of Occupational Health and Safety**
Yavuz A.
International journal of advances in engineering and pure sciences (Online), vol.35, no.4, pp.504-514, 2023 (Peer-Reviewed Journal)
- IV. **Investigation of vehicle-induced whole-body vibration with experimental rat models**
YAVUZ A. N., Yavuz A.
Journal of Research in Pharmacy, vol.27, no.6, pp.2310-2329, 2023 (ESCI)
- V. **A Fuzzy Logic Approach on the Evaluation of Driving Styles and Investigation of Drivability Calibration Effects**
AKŞİT S., YAVUZ A., ŞEN O. T.
GAZI UNIVERSITY JOURNAL OF SCIENCE, vol.35, pp.668-680, 2022 (Scopus)
- VI. **Application of Artificial Neural Network to Predict Exhaust Emissions from Road Transport**
Aydın M., Yavuz A., Soruşbay C.
International Journal of Scientific and Technological Research, vol.4, no.2, pp.13-22, 2018 (Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **Application of Piezoelectric Shunt Damping Treatment for Brake Squeal Suppression**
Yavuz A., Şen O. T.
15th International Scientific Conference on Aeronautics, Automotive, and Railway Engineering and Technologies, BulTrans 2023, Hybrid, Sozopol, Bulgaria, 10 - 13 September 2023, vol.3129
- II. **Mathematical modelling of friction induced high frequency noise and vibration mechanism in vehicle brake systems through experimental data**
Balcı Ö., Yavuz A., Özkan M., Şen O. T.
52nd International Congress and Exposition on Noise Control Engineering, Tokyo, Japan, 20 - 23 August 2023, pp.1-11
- III. **Investigation of Screw Torque Dependent Performance Against Changing Mechanical Shock Values in a Boresight Mechanism**
Mutlu C., Şen O. T., Yavuz A.
International Graduate Research Symposium, İstanbul, Turkey, 16 - 18 May 2023, pp.1-2
- IV. **Modal Analysis of Air Tube Bracket through Experimental and Numerical Approaches**
Hotamış C. B., Turhan M., Kendirci C., Altınsele D., Yavuz A., Şen O. T.
INTERNATIONAL GRADUATE RESEARCH SYMPOSIUM IGRS'22, İstanbul, Turkey, 1 - 03 June 2022, pp.1
- V. **Disc brake squeal analysis using nonlinear mathematical model**
Yavuz A., Şen O. T.
50th International Congress and Exposition of Noise Control Engineering, INTER-NOISE 2021, Washington, United States Of America, 1 - 05 August 2021
- VI. **Optimization of suspension characteristics for increasing expected daily exposure durations in vehicles according to ISO 2631-1 standard using genetic algorithms**
Yavuz A., Guney A.
48th International Congress and Exhibition on Noise Control Engineering, INTER-NOISE 2019 MADRID, Madrid, Spain, 16 - 19 June 2019
- VII. **Prediction of the Number of Work Accidents in Coal Mining Sector with Artificial Neural Networks Method for year 2017**
Yavuz A., Hacıbektaşoğlu S. E.
International Congress on Occupational Safety and Health, İstanbul, Turkey, 6 - 09 May 2018, pp.545
- VIII. **EFFECT OF ROAD ROUGHNESS IN THE EVALUATION OF BUS SEAT COMFORT**
YAVUZ A.
International Automotive Technologies Congress, Bursa, Turkey, 7 - 08 May 2018

Supported Projects

Şentürk Lüle S., Akalın Ö., Öztürk S. B., Yavuz A., TUBITAK Project, Çevreye Uyumlu Sürdürülebilir İleri Araç Teknolojileri, 2023 - 2027

Şen O. T., Yavuz A., Project Supported by Higher Education Institutions, Yüksek frekanslı fren gürültüsü probleminin çalışılabilirliği kontrollü bir test sistemi geliştirilmesi, 2018 - 2020

Scientific Refereeing

International journal of advances in engineering and pure sciences (Online), National Scientific Refreed Journal, February 2023

Metrics

Publication: 20

Awards

Yavuz A., YOUNG PROFESSIONALS AWARD, International Institute Of Noise Control Engineering , June 2019

Non Academic Experience

Boğaziçi Üniversitesi