# Asst. Prof. KERİM DENİZ KAYA

### **Personal Information**

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Publons / Web Of Science ResearcherlD: P-2100-2019

ScopusID: 57193026118 Yoksis Researcher ID: 174920

### **Education Information**

2015 - 2023	Doctorate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Turkey
2008 - 2015	Postgraduate, Dokuz Eylul University, Fen Bilimleri Enstitüsü, Turkey
2003 - 2008	Undergraduate, Dokuz Eylul University, Mühendislik Fakültesi, Turkey

## **Foreign Languages**

English, C1 Advanced

#### **Dissertations**

Design and control of a compliant rotary actuator, Dokuz Eylul University, Fen Bilimleri Enstitüsü,

Postgraduate

## **Research Areas**

Control and System Engineering, Analysis and Synthesis Methods, Simulation, Modelling and Identification, Control of Biological Systems, Distributed Control Systems, Controllers, Nonlinear Systems, Status Observers and Estimation, Measurement and Control of Nonelectric Variables, Measurement and Control of Electric and Magnetic Variables, Industrial automation, Actuating and Final Control Devices, General System Theory, Checker, Communication Control Systems, Stability, Discrete Time Systems and Computer Control, Control Systems and Instrumentation, Mathematical Techniques, Optimal Control, System Diagnostics, Adaptive Systems, Time Varying Systems, Robotics and Mechatronics Systems, Smart Factors, Field and Service Robots, Computer Vision, Human and Robot Interaction, Humanoid Robots, Mechatronic Systems, Micro and Nano Robots, Route and Motion Planning, Signal Processing, Signal Processing for Sensor Sequences, Multi-mode Signal Processing, Multimedia, Image and Video Processing, Signal Processing for Communication, Pattern Recognition and Analysis, Signal Processing Theory and Methods, Artificial Intelligence, Computer Learning and Pattern Recognition, Fuzzy Sets and Systems, Neural Networks, MEMS, Semiconducting Materials and Devices, Mechanical Engineering, Energy, Fluid Machinery, Alternative Energy Resources, Solar energy, Construction and Manufacturing, Machine Elements, Machine Design, Computer Aided Design and Manufacturing, Material, Machine Theory and Dynamics, Machine Dynamics, System Dynamics and Control, Mechanisms, Vehicle Systems Dynamics, Robotics, Mechatronics, Modeling and Simulation of Dynamic Systems, Mechanical, Solid Mechanics, Finite Element Methods, Naval Architecture and Marine Engineering, Ship Hydromechanics, Ship Machines, Engineering and Technology

## **Academic Titles / Tasks**

## Published journal articles indexed by SCI, SSCI, and AHCI

I. Determination of operating parameters of an AUV following a preplanned trajectory using hydrodynamic analysis data

KAYA K. D., GÖREN A., YILMAZ S., BAYRAMOĞLU K.

OCEAN ENGINEERING, vol.217, 2020 (SCI-Expanded)

II. Numerical investigation of valve lifts effects on performance and emissions in diesel engine BAYRAMOĞLU K., YILMAZ S., KAYA K. D.

INTERNATIONAL JOURNAL OF GLOBAL WARMING, vol.18, pp.287-303, 2019 (SCI-Expanded)

III. Adaptive state feedback controller design for a rotary series elastic actuator KAYA K. D., Cetin L.

TRANSACTIONS OF THE INSTITUTE OF MEASUREMENT AND CONTROL, vol.39, no.1, pp.61-74, 2017 (SCI-Expanded)

#### **Articles Published in Other Journals**

I. Numerical and Theoretical Thermal Analysis of Ship Provision Refrigeration System BAYRAMOĞLU K., YILMAZ S., KAYA K. D. JOURNAL OF ETA MARITIME SCIENCE, vol.7, no.2, pp.137-149, 2019 (ESCI)

II. 3D Printed Solar Catamaran Model Design and Embedded Sensing System Application BAYRAMOĞLU K., YILMAZ S., KAYA K. D.

International journal of 3D Printing Technologies and Digital Industry, vol.2, no.3, pp.12-21, 2018 (Peer-Reviewed Journal)

## Refereed Congress / Symposium Publications in Proceedings

I. Development of Modular Buoy for Marine Weather Data Collection

Kaya K. D., Yılmaz S., Halat B., Maden Ö. F.

2nd INTERNATIONAL SYMPOSIUM SERIES ON GRADUATE RESEARCHES, İzmir, Turkey, 14 - 15 December 2023

II. Comparative Research of Nonlinear Decoupled Tracking Controller Design for an Open-Frame AUV Ceyhun H. E., Deniz Kaya K. D., Bayramoğlu K., GÖREN A.

27th International Conference on Methods and Models in Automation and Robotics, MMAR 2023, Virtual, Online, Poland, 22 - 25 August 2023, pp.145-150

III. A STUDY ON THERMAL BEHAVIOUR OF A 3D PRINTER AND EXTRUDED MATERIAL WITH THERMAL IMAGING METHOD

Arhan S., YILMAZ S., KAYA K. D., BAYRAMOĞLU K.

5th INTERNATIONAL CONGRESS ON 3D PRINTING (ADDITIVE MANUFACTURING) TECHNOLOGIES AND DIGITAL INDUSTRY, Antalya, Turkey, 3 - 06 June 2021

IV. CFD Analysis of Stern Tube Lubrication System Under Changing Shaft Speed and Oil Types BAYRAMOĞLU K., KAYA K. D., YILMAZ S.

III. GLOBAL CONFERENCE ON INNOVATION IN MARINE TECHNOLOGYANDTHE FUTURE OF MARITIME TRANSPORTATION, 18 - 19 April 2019

V. Determination Of Working Parameters Of 3d Printers On Various Operation Modes With Different Sensing Systems

KAYA K. D., YILMAZ S., BAYRAMOĞLU K., GÖKSU B.

4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry 2019, Antalya, Turkey, 11 - 14 April 2019

## VI. Utilization of 3d Printing Technologies in Marine Applications

BAYRAMOĞLU K., KAYA K. D., YILMAZ S., GÖKSU B.

4th International Congress on 3D Printing (Additive Manufacturing) Technologies and Digital Industry 2019, Antalya, Turkey, 11 - 14 April 2019

#### VII. AN IMPROVED SYSTEM DESIGN FOR SOLAR BOATS

Erginer K. E., Gülmez Y., Konur O., Fikir E., Göksu B., Kaya K. D., Pamık M., Yüksel O., Korkmaz S. A. 7th Global Conference on Global Warming, İzmir, Turkey, 24 - 28 June 2018

VIII. A numerical investigation of valve lift effects on marine diesel engine and emission prediction BAYRAMOĞLU K., KAYA K. D., YILMAZ S., BAYRAKTAR M., GÖKSU B.

7th Global Conference on Global Warming (GCGW-2018), İzmir, Turkey, 24 - 28 June 2018

IX. Numerical Analysis of Diesel Engine Performance and Exhaust Emissions with Diesel-Ethanol Fuel

Kaya K. D., Bayramoğlu K., Yılmaz S., Nuran M.

7th Global Conference on global warming, İzmir, Turkey, 27 - 28 June 2018

X. Design and Implementation of A Solar Catamaran Model with 3D Printer and Sensor Applications KAYA K. D., BAYRAMOĞLU K., YILMAZ S.

3rd International congress on 3D Printing Technologies and Digital Industry, 21 April 2018

XI. Dizel Motorlarda Kullanılan Farklı Yakıt Karışımları için Emisyon Tahmini

BAYRAMOĞLU K., YILMAZ S., KAYA K. D.

II. Uluslararası Şehir, Çevre, Sağlık Kongresi, 19 - 20 April 2018

XII. Linear Load Transfer Based Horizontal Motion Control of a ROV

KAYA K. D., GÖREN A.

WELMO 2017, İzmir, Turkey, 4 - 05 May 2017, pp.102-105

XIII. Yarı Otonom Bir Sualtı Robotu Tasarımı

GÖREN A., KAYA K. D.

Otomatik Kontrol Türk Milli Komitesi Ulusal Toplantısı, Denizli, Turkey, 10 - 12 September 2015

XIV. Establishing Physics Laboratory with Electrical and Mechanical Equipment for Maritime Education FİKİR E., YILMAZ S., KAYA K. D., MICHEAL S.

First International Maritime and Transportation Symposium, Girne, Cyprus (Kktc), 6 - 07 March 2015

## **Supported Projects**

2019 - 2019

Dynamic Motion Control of an Underwater Robot for Observation and Research in Shallow Waters, TUBITAK Project

#### **Metrics**

Publication: 19
Citation (WoS): 37
Citation (Scopus): 33
H-Index (WoS): 3
H-Index (Scopus): 3