#### Assoc. Prof. LEVENT LATIFOĞLU

### **Personal Information**

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### **Education Information**

Doctorate, Erciyes University, Fen Bilimleri Enstitüsü, Turkey 2009 - 2017 Postgraduate, Erciyes University, Fen Bilimleri Enstitüsü, Turkey 2000 - 2003 Undergraduate, Istanbul Technical University, Turkey 1996 - 2000

### **Research Areas**

**Engineering and Technology** 

#### Academic Titles / Tasks

Assistant Professor, Erciyes University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2019 - Continues

#### Academic and Administrative Experience

Internship Committee Member, Erciyes University, Mühendislik Fakültesi, İnşaat Mühendisliği, 2021 - Continues Erciyes University, 2021 - Continues

#### Courses

Final project, Undergraduate, 2021 - 2022, 2020 - 2021 Introduction to Artificial Neural Network Applications in Civil Engineering, Postgraduate, 2022 - 2023 Artificial Neural Network Applications in Civil Engineering II, Postgraduate, 2021 - 2022, 2020 - 2021 Hydroulic Structures II, Undergraduate, 2021 - 2022, 2020 - 2021 Hydroulic Structures 1, Undergraduate, 2022 - 2023, 2021 - 2022 Hydroulic Structures 1, Undergraduate, 2022 - 2023, 2021 - 2022 Hydroulic Structures II, Undergraduate, 2021 - 2022, 2020 - 2021 Hydroulic Structures II, Undergraduate, 2021 - 2022, 2020 - 2021 Hydroelectric Power Production, Undergraduate, 2021 - 2022, 2020 - 2021 Seminar, Doctorate, 2021 - 2022

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

I. Drought index time series forecasting via three-in-one machine learning concept for the Euphrates basin LATİFOĞLU L., BAYRAM S., Aktürk G., ÇITAKOĞLU H.

Earth Science Informatics, 2024 (SCI-Expanded)

- II. A Novel Approach for High-Performance Estimation of SPI Data in Drought Prediction LATİFOĞLU L., Özger M.
   Sustainability (Switzerland), vol.15, no.19, 2023 (SCI-Expanded)
- III. A hybrid approach to predict the bearing capacity of a square footing on a sand layer overlying clay UNCUOĞLU E., LATİFOĞLU L., KAYA Z.

Geomechanics and Engineering, vol.34, no.5, pp.561-575, 2023 (SCI-Expanded)

IV. High-performance prediction model combining minimum redundancy maximum relevance, circulant spectrum analysis, and machine learning methods for daily and peak streamfow
 Latifoğlu L., Kaya E.

THEORETICAL AND APPLIED CLIMATOLOGY, pp.1-23, 2023 (SCI-Expanded)

- V. Predicting liquefaction-induced lateral spreading by using the multigene genetic programming (MGGP), multilayer perceptron (MLP), and random forest (RF) techniques
   KAYA Z., LATİFOĞLU L., UNCUOĞLU E., EROL A., Keskin M. S.
   BULLETIN OF ENGINEERING GEOLOGY AND THE ENVIRONMENT, vol.82, no.3, 2023 (SCI-Expanded)
- VI. Comparison of neural network, Gaussian regression, support vector machine, long short-term memory, multi-gene genetic programming, and M5 Trees methods for solving civil engineering problems

UNCUOĞLU E., ÇITAKOĞLU H., LATİFOĞLU L., BAYRAM S., Laman M., İLKENTAPAR M., ÖNER A. A. APPLIED SOFT COMPUTING, vol.129, 2022 (SCI-Expanded)

- VII. The Performance Analysis of Robust Local Mean Mode Decomposition Method for Forecasting of Hydrological Time Series
  - LATİFOĞLU L.

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY-TRANSACTIONS OF CIVIL ENGINEERING, vol.46, no.4, pp.3453-3472, 2022 (SCI-Expanded)

VIII. A novel combined model for prediction of daily precipitation data using instantaneous frequency feature and bidirectional long short time memory networks LATIFOĞLU L.

ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH, vol.29, no.28, pp.42899-42912, 2022 (SCI-Expanded)

IX. Modelling of lateral effective stress using the particle swarm optimization with machine learning models

UNCUOĞLU E., LATİFOĞLU L., Ozer A. T.

ARABIAN JOURNAL OF GEOSCIENCES, vol.14, no.22, 2021 (SCI-Expanded)

- X. Importance of hybrid models for forecasting of hydrological variable
   Latifoglu L., Kisi O., LATİFOĞLU F.
   NEURAL COMPUTING & APPLICATIONS, vol.26, no.7, pp.1669-1680, 2015 (SCI-Expanded)
- XI. Investigation of Empirical Mode Decomposition in Forecasting of Hydrological Time Series Kisi O., Latifoglu L., LATİFOĞLU F.

WATER RESOURCES MANAGEMENT, vol.28, no.12, pp.4045-4057, 2014 (SCI-Expanded)

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

I. Deep Learning Approaches for Stream Flow and Peak Flow Prediction: A Comparative Study Latifoğlu L., Altuntaş E. The European Journal of Research and Development, vol.4, no.1, pp.61-84, 2024 (Peer-Reviewed Journal) II. Predicting Meteorological Drought in Iraq: An Evaluation of Machine Learning Techniques by **Random Forest and Artificial Neural Networks** Latifoğlu L., Hasan Z., Sami International Research Journal of Engineering and Technology, vol.10, no.11, pp.52-61, 2023 (Peer-Reviewed Journal) III. Investigation Of Lake Water Level Forecasting Performances Of Subband Decomposition Techniques Latifoğlu L., Haktanır T. Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.38, no.3, pp.657-675, 2022 (Peer-Reviewed Journal) IV. Prediction of Daily Streamflow Data Using Ensemble Learning Models Latifoğlu L., Canpolat Ü. The European Journal of Research and Development, vol.2, no.4, pp.356-371, 2022 (Peer-Reviewed Journal) V. Standard precipitation index estimation with deep neural network model Latifoğlu L. Niğde Ömer Halisdemir Üniversitesi Mühendislik Bilimleri Dergisi, vol.11, no.4, pp.1006-1024, 2022 (Scopus) VI. Application of the novel circulant singular spectrum analysis ensemble model for forecasting of streamflow data Latifoğlu L. Arabian Journal of Geosciences volume, vol.15, no.10, pp.1-16, 2022 (Peer-Reviewed Journal) VII. A novel approach for prediction of daily streamflow discharge data using correlation based feature selection and random forest method Latifoğlu L. INTERNATIONAL ADVANCED RESEARCHES and ENGINEERING JOURNAL, vol.06, no.01, pp.1-7, 2022 (Peer-**Reviewed** Journal) VIII. Forecasting Of Stream Flow Using Singular Spectrum Analysis And Long-Short Term Memory Networks LATİFOĞLU L., Nuralan K. B. Avrupa Bilim ve Teknoloji Dergisi, pp.376-381, 2020 (Peer-Reviewed Journal)

# **Refereed Congress / Symposium Publications in Proceedings**

I. Performance Analysis of Principal Component Analysis and Long Short-Term Memory Networks Using Hydrometeorological Variables for Forecasting of Daily Stream-Flow Data Latifoğlu L.

1st International Conference on Applied Engineering and Natural Sciences, Konya, Turkey, 1 - 03 November 2021, pp.271-276

 II.
 HIGH PERFORMANCE PREDICTION OF STREAM FLOW DATA USING EMPIRICAL WAVELET

 TRANSFORM AND DECISION TREE ALGORITHMS

 Latifoğlu L.

 CUKUROVA 7th INTERNATIONAL SCIENTIFIC RESEARCHES CONFERENCE, Adana, Turkey, 7 - 08 September 2021,

CUKUROVA 7th INTERNATIONAL SCIENTIFIC RESEARCHES CONFERENCE, Adana, Turkey, 7 - 08 September 2021, pp.774-783

III.FORECASTING OF DAILY STREAMFLOW DATA WITH GATED RECURRENT UNIT, LONG-SHORT-TERM<br/>MEMORY NETWORKS AND BIDIRECTIONAL LONG-SHORT-TERM MEMORY NETWORKS<br/>Latifoğlu L.

3. ULUSAL BAŞKENT DİSİPLİNLER ARASI BİLİMSEL ÇALIŞMALAR KONGRESİ, 14 - 15 March 2021, pp.302-310

IV. Evaluating Stream Flow Forecasting Performance Using Adaptive Network Based Fuzzy Logic Inference System, Artificial Neural Networks with Feature Selection LATİFOĞLU L. IConTES 2020: International Conference on Technology, Engineering and Science, 29 November - 01 December 2020

- V. Kızılırmak Yamula Barajı Rezervuarında Sediment Dağılımının HEC-6 ile İncelenmesi ARDIÇLIOĞLU M., Latifoğlu L.
   XVII. Teknik Kongre ve Sergisi, İstanbul, Turkey, 1 - 04 December 2004
- VI. The Modelling Of Kizilirmak-Yamula Station Sediment Movement With Hec-6 Latifoğlu L., ARDIÇLIOĞLU M.
   2nd FAE International Symposium, Cyprus (Kktc), 1 - 04 September 2002

## **Supported Projects**

ARDIÇLIOĞLU M., KIZIL Y., LATİFOĞLU L., ÖZDİN S., Project Supported by Higher Education Institutions, DOĞAL AKARSULARDA AKIM ÖZELLİKLERİNİN ENTROPİ YÖNTEMİ İLE BELİRLENMESİ, 2009 - 2011

## Metrics

Publication: 26 Citation (WoS): 158 Citation (Scopus): 138 H-Index (WoS): 5 H-Index (Scopus): 5

## Non Academic Experience

DEVLET SU İŞLERİ XII. BÖLGE MÜDÜRLÜĞÜ