Kutay Donmez

Istanbul/TURKEY

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Curriculum Vitae

Istanbul Technical University
Meteorological Engineering BSc.
Atmospheric Sciences MSc. (cont.)

EDUCATION

Atmospheric Sciences, MSc. Student | *GPA: 3.94/4*   2021 – 2023 June
Istanbul Technical University; Istanbul, Turkey
Thesis: Non-stationary extreme value analysis over downscaled future
        projections of extreme precipitation indices (using COSMO-CLM)

Meteorological Engineering, BSc. | *GPA: 3.45/4*   2016 - 2021
Istanbul Technical University; Istanbul, Turkey
Thesis: Assessment of Urbanization Impact On Heavy Precipitation in   Istanbul

FIELD EXPERIENCE

Project Engineer   2021 Jun – 2022 March
Cirrus
- Utilized ML to conduct a climate risk analysis (RCP45/85) as part of the UNDP's *Enhancing Adaptation Action in Turkey* Project.

Data Science Intern   2021 Mar - Dec
Tarentum AI
- Examined data from wind energy SCADA dat and models.
- Drew conclusions regarding wind power generation while performing error calculations.
- Developed internal dashboards utilizing dash-plotly.

Volunteer Junior Project Researcher   2021 Jan - Jun
UNDP, Turkey
- Volunteered in the Enhancing Adaptation Action in Turkey Project and carried out post-processing of the regCM outputs.

Student Internship   2020 Aug - Sep
Alkazar Technology
- Explored different ML algorithms to nowcast radar imageries.

Student Internship   2019 Aug - Sep
DSI Antalya
- Managed flood calculations for the city of Antalya by utilizing ArcGIS.

PUBLICATIONS

Donmez, K., Donmez, B., Ustun, H.D-U., Unal, Y., 2023. Boundary-dependent urban impacts on timing, pattern, and magnitude of heavy rainfall in Istanbul. *Atmos. Res*. 106681 https://doi.org/10.1016/j.atmosres.2023.106681.

Donmez, B., **Donmez, K.**, Ustun, H.D-U., Unal, Y., 2022. Urbanization-induced changes in convective and frontal precipitation events in Ankara. *Urban Clim*. 46, 101316 https://doi.org/10.1016/j.uclim.2022.101316.

PUBLIC PRESENTATIONS

Donmez, B., **Donmez, K**., Yuruk Sonuc, C., and Unal, Y.: Present and projected humid heat exposure and precipitation extremes in Turkey, EGU General Assembly 2023, Vienna, Austria, 24–28 Apr 2023, EGU23-12059, https://doi.org/10.5194/egusphere-egu23-12059, 2023.

PUBLIC PRESENTATIONS (cont.)

Donmez, K., Donmez, B., Sonuc, C.Y., Unal, Y., 2022. Evaluating the Urban Impact on Temperature Records of Istanbul and Ankara: How Individual Metropoles May Differ in Their Response to Urbanization? 10th International Symposium on Atmospheric Sciences, Istanbul, Turkey. Presentation Clip

Dönmez, K., Dönmez, B., Diren-Üstün, D., and Ünal, Y.: Assessment of Urbanization Impact On Heavy Precipitation in Istanbul, Turkey, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-3057, https://doi.org/10.5194/egusphere-egu21-3057, 2021.

Dönmez, B., **Dönmez, K.**, Diren-Üstün, D., and Ünal, Y.: The Impact of Urban Land Use On the Springtime Frontal Precipitation Event in Ankara: A Case Study of 5 May 2014, EGU General Assembly 2021, online, 19–30 Apr 2021, EGU21-3056, https://doi.org/10.5194/egusphere-egu21-3056, 2021.

RESEARCH INTERESTS AND TECHNICAL SKILLS

Interests:	Numerical Weather Prediction, Climate Modeling, Urban Meteorology, Extreme Events, Statistics in Atmospheric Sciences, Big-Data Analysis
Computer:	Python, WRF, Database, GIS, Linux, Bash, Javascript, COSMO-CLM
Data:	netCDF, HDF, GRIB, raster (i.e., tif.), text files (i.e., .csv, .txt)
Library:	xarray, numpy, pandas, wrf-python, matplotlib, metpy, sklearn

AWARDS

International Global Climate Change Congress 2021 Presentation Clip   2021
Canakkale Onsekiz Mart University
  • Most Innovative Paper Award

PERSONAL PROJECTS

Climaturk | Website   2021 - Present
  • Visualizing and elaborating on past thunderstorm events that struck turkey.
  • Viewing climatological conditions for atmospheric variables in turkey.
  • Analyzing unique and practical climatological indices for turkey.

Learn with Kutay & Berkay | Education   2021 - Present
  • Includes contents about how to utilize atmospheric model datasets using the state-of-art python libraries.

Visjobs | Python Library   2020 - Present
  • Effectively accessing and visualizing atmospheric data on python.

IN-CAMPUS EXPERIENCE

Data Analysis Team Leadership | Website   2019 - 2021
Istanbul Technical University – High Altitude Balloon Team
  • Trained with data analysis team to develop high altitude balloon from scratch and participate in the Balloon Challenge competition which cancelled due to pandemic.

Organization Coordinator | Website   2019 - 2020
Istanbul Technical University – Meteorological Research Club (METAR)
  • Coordinated activities to familiarize students with the department

LANGUAGES

*ENGLISH***:**
  • IELTS (06.01.2022): Overall: 7.5 (**C1**)**,** Listening: 8.5, Reading: 7, Speaking: 7, Writing: 7

TURKISH: Native/Bilingual

VOLUNTEER SOCIAL EXPERIENCE

Social Media Editor | Instagram   2020 - Present
TMMOB Chamber of Meteorological Engineers
- Managing Instagram Account of TMMOB Chamber of
  Meteorological Engineers.

International Volunteer Workcamp   2020
COCAT – Reus, Spain
- CAL MASSÓ: Art, Music and movement.

International Volunteer Workcamp | Credentials   2019
CONCORDIA – Avignon, France
- Participated in the restoration of a historic church.

MEDIA APPEARANCE

TMMOB Chamber of Meteorological Engineers Presentation Clip   2021
1st year special talk

Mor Ve Otesi (music band) Cover Competition Presentation Clip   2018
Participated in the contest

The Voice Turkey Presentation Clip   2017
Supported my twin brother

High School Music Competition Presentation Clip   2015
Playing drums for the band