

ERAY CACEOĞLU

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Nationality Republic of Turkey



Education

- October 2020 – Present
Master of Science in Geotechnics
Middle East Technical University (METU),
Ankara, Turkey
CGPA: 3.93/4.00
- October 2015 – July 2020
Bachelor's Degree in Civil Eng.
Middle East Technical University (METU),
Ankara, Turkey
Diploma Grade: 3.56/4.00
- September 2011 – June 2015
High School
Nafi Güral Science High School, Kütahya,
Turkey

Successes in Educational Life

- **March 2021 – Present**
Scientific and Technological Research
Council of Turkey (TÜBİTAK) Domestic
Graduate Scholarship
- **July 2020**
Middle East Technical University High
Honor Diploma
- Throughout the undergraduate
education, 5 times High Honor Student
and 2 times Honor Student
- **June 2015**
1908th place in Turkey University
Entrance Exam (0.1% top ranking)

Academic Research

- October 2020 – September 2021
Project Assistant
Project Name: Offshore Wind Farms Large-
Scale Integration in Turkey – Windflag
*Funded by Danish International Development
Agency (DANIDA)*
- March 2019 – February 2020
*METU Civil Engineering Department CE STAR
Undergraduate Research Program*
Offshore Wind Turbine Foundations
Supervisor: Dr. Nejan Huvaj

Master of Science Ongoing Thesis Work

Proposed Title: Offshore Wind Turbines in
Marmara Region, Turkey: A Site Selection
Framework and Monopile Design

Planned Defence: January 2023

Advisor: Dr. Nejan Huvaj

Co-advisor: Dr. Elif Oğuz

Journal Papers

Published

Caceoğlu, E., Yildiz, H. K., Huvaj, N., Oğuz, E., & Guerrero, J. M. (2022). Offshore wind power plant site selection using Analytical Hierarchy Process for Northwest Turkey. *Ocean Engineering*, 252. <https://doi.org/10.1016/j.oceaneng.2022.111178>

Under Review

Caceoğlu, E., Yildiz, H. K., Huvaj, N., Oğuz, E., & Guerrero, J. M. Comparison of Hybrid Multi-Criteria Decision-Making Methods for Offshore Wind Power Plant Site Selection in Turkey. Submitted to *Journal of Renewable and Sustainable Energy Reviews*.

Conference Papers

- Yerlikaya, N.C., Çakan, Ç., Başara, I., **Caceoğlu, E.** and Huvaj, N. (2021), "Preliminary Study on Site Selection for Floating Hybrid Wind and Solar Energy Systems in Turkey", *Proceedings of the 14th International Congress on Advances in Civil Engineering (ACE2020-21)*, Istanbul, Turkey (online congress), p.721-729 (poster presentation)
- Huvaj, N., **Caceoğlu, E.** & Baidol, Y. (2019), Deniz Üstü Rüzgar Türbinleri: Temel Tipi Seçimi Ve Deniz Tabanı Zemin Araştırmaları. *5th İzmir Wind Symposium*, İzmir, Turkey. p. 197 – 210. (in Turkish)

Teaching Experiences

- October 2021 – Present
Teaching Assistant
Middle East Technical University Civil Engineering Department Geotechnics Division
Ankara, Turkey

Assisted undergraduate courses:

- **Soil Mechanics**
Grading of homeworks along with conducting and grading the laboratory experiments:
 - *Specific Gravity of Soils (ASTM D854)*
 - *Direct Shear Test (ASTM D3080)*
 - *Constant Head Permeability Test (ASTM D2434)*
 - *Soil Hydrometer Test (ASTM D7928)*
- **Foundation Engineering II (Deep Foundations)**
Grading of homeworks (design of pile foundations considering both vertical and horizontal load capacity along with settlement and lateral deflection) and conducting problem solving hours
- **Geotechnical Engineering Design**
Grading of homeworks (about site characterization, design of shallow foundations, pile foundations, slopes, retaining walls, mechanically stabilized earthwalls, preloading) and conducting Slide2 tutorial hours

Undergraduate Internship Experiences

- **July – August 2019**
Middle East Technical University Soil Mechanics Laboratory, Ankara, Turkey
Work done: Helping graduate students in soil mechanics experiments (Specific gravity of soils, sieve analysis, soil hydrometer and Atterberg limits)
- **June – July 2018**
Gülermak – Nurol – Makyol Metro Construction Partnership
Ümraniye – Ataşehir – Göztepe Metro Construction, İstanbul, Turkey
Work done:
 - Following of daily site works for tunnel construction by New Austrian Tunnelling Method (NATM)
 - Preparation of monthly progress payment claim

Computer Skills

- Microsoft Office
 - ArcMap & ArcGIS Pro
 - Rocscience Slide2 & Settle3
 - AutoCAD
 - MathCAD
- Written codes:*
- *Basics of Finite Element Method (FEM)*
- MATLAB
- Written codes:*
- *Soil classification according to USCS*
 - *Preliminary group pile foundation design under vertical static load*

Language

- Turkish *Native*
 - English *Advanced*
- IELTS Academic Test Score: 8.0**
(September 2022)
- Listening: 8.5
Reading: 9.0
Writing: 7.0
Speaking: 7.0

Taken Geotechnical Engineering Courses

- CE363 Soil Mechanics
- CE366 Foundation Engineering
- CE461 Computer Applications in Geotechnical Engineering
- CE462 Foundation Engineering II (Deep Foundations)
- CE464 Ground Improvement
- CE468 Geotechnical Engineering Design
- CE563 Advanced Soil Mechanics I
- CE564 Advanced Soil Mechanics II
- CE5601 Geotechnical Earthquake Engineering
- CE5602 Numerical Modelling in Geotechnical Engineering

Events Attended

- **September 2022**
1st Training School (Chania, Greece) for Modular Energy Islands for Sustainability and Resilience (MODENERLANDS) COST Action (Action No: CA20109)
- **February 2022**
4th International Symposium on Frontiers in Offshore Geotechnics (ISFOG) Pre-symposium Workshop: New Proposed ISO/API p-y Curves for Piles (given by Dr. Phillippe Jeanjean)
- **October 2021**
14th International Congress on Advances in Civil Engineering, Istanbul, Turkey
(Presenter)
- **September 2021**
Offshore Wind Energy Training (webinar series given by Turkish Offshore Wind Energy Association)
- **April 2021**
Bridging the Gap. Science for the Public (Online Communications Training Seminar given by DANIDA Fellowship Centre)
- **August 2020**
Online course: Wind Energy (given by Technical University of Denmark)
- **October 2019**
5th İzmir Wind Symposium, İzmir, Turkey
(Presenter)
- **July 2019**
Mathworks MATLAB Onramp Online Course

References

- Dr. Nejan Huvaj
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- Dr. Elif Oğuz
Middle East Technical University
Civil Engineering Department
Hydraulics Division
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