Gokmen Dedemen

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Date of Birth: July 23,1993 Place of Birth: Ankara, Turkey

Citizenship: Turkish

Sex: Male

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Google Scholar Link:

https://scholar.google.com.tr/citations?user=cqZelo4AAAAJ&hl=tr&oi=ao

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EDUCATION

Middle East Technical University, Ankara, Turkey, 2021-2025 (expected) GPA: 4.0/4.0

Doctor of Philosophy in Civil Engineering with an empasis on Water Resources **Engineering and Management**

New York University Tandon School of Engineering, 2016-2018

Master of Science in Construction Management with Thesis Research Assistant in the Department of Civil and Urban Engineering **GPA: 3.7/4.0**, awarded in January 2018

- Study Emphases: Construction Management, Computer Science, Urban Informatics
- **Research Experience**: Construction Management, Building Information Modeling (BIM), Construction Project Management, Data-Driven Buildings, Building Energy Efficiency, Virtual Reality

Middle East Technical University, Ankara, Turkey, 2011-2016

Bachelor of Science in Civil Engineering

- GPA: 3.63/4.0 (3rd ranking out of 282 students)
- Awarded in June 2016
- Graduated as High honor student
- Undergraduate Assistant in Geomechanics and Technology Research Group
- Advisor: Asst. Prof. Nejan Huvaj

Ankara Anatolian High School, Ankara, Turkey, 2007-2011

Advanced Courses in Science and Mathematics • GPA: 87.87/100

COURSEWORK

Machine Learning for Cities (MASTER'S DEGREE) Data Structures and Algorithms Principles of Urban Informatics **Construction Cost Estimation** Construction Project Management

Construction Modeling Techniques Info. Systems in Project Management

Risk Analysis

Construction Scheduling

COMPUTER SKILLS

Languages: Python, C++, Matlab (proficient in all)

Software: Primavera, Revit, AutoCAD, Solibri, Tekla, Navisworks, Vico

LANGUAGES Turkish (Native)

English (TOEFL score: 103)

German (Deutsches Sprachdiplom B1)

PROJECTS & EXPERIENCE-

Presidency of Republic of Turkey, Presidency of Strategy & Budget, Ankara,

Turkey, June 2020 - ongoing

Expert in the Water Resources Sector:

- National Project Manager responsible for the projects of State Hydraulic Works (DSI)
- Developing policies and strategies for the sector and contributing to the national development plan, medium term program, medium term financial plan and Presidential annual programs.
- Management of annual investment programs of the country.
- Management of the projects of State Hydraulic Works (DSI) such as dams, flood control and irrigation facilities
- Contributing to the projects being implemented in collaboration with international organizations such as OECD, and the World Bank to execute projects with the scope of flood and drought resilience.

MKEK - Turkish Mechanical and Chemical Industry Company, Kırıkkale,

Turkey, August 2019-June 2020

Civil Engineer:

- Preparing cost estimates for construction projects
- Ensuring compliance with specification and laws
- Conducting field inspections
- Conducting structural analysis and designing reinforced concrete structures

SAP, Ankara, Turkey, December 2018 - January 2019

Young Professional Program Trainee: A training designed to equip selected young professionals in Turkey with the knowledge to start their careers as SAP consultants.

Certificates Obtained:

- SAP S/4 HANA Implementation Scenarios for Architects
- SAP Activate Project Manager

Erfolg Design & Construction, Ankara, Turkey, February-April 2018 *Project Manager:* Zulal Resort &Spa project located in Doha, Qatar

New York University, Brooklyn, NY, Fall 2016-Fall 2017

The Defense Advanced Research Projects Agency (DARPA)

Project: "Neuroscience for Architecture"

- Created Virtual Reality (VR) models using gaming engines (Unity 3D)
- Performed VR experiments on human subjects using biometric sensors such as EEG, EMG, and GSR
- Performed data analysis on biometric sensor data

Michigan State University, East Lansing, MI, Fall 2015

Engineering Research Internship: "Calibration of MEPDG fatigue model using Push-Pull test data and VECD analyses."

Ozguven Construction, Ankara, Turkey, June-September 2014 *Civil Engineering Intern:* Site Engineer in the Otonomi Construction Project (The largest auto showroom project in the Europe)

MEMBERSHIPS

American Society of Civil Engineers (ASCE), member, since 2014

NYU Turkish Student Association, member, since 2016

HONORS & AWARDS

3rd Rank in the 2016 GeoPrediction Competition Organized by American Society of Civil Engineers (ASCE) in Phoenix, Arizona

ASCE Travel Grant for 2016 GeoPrediction Competition (\$500)

Middle East Technical University - Dean's List: 6 Semesters

Ranking in the top %0.01 among 1.5 million high school graduates in the Turkish University Entrance Exam, June 2011

Fulbright Scholarship Recipient for Doctoral Studies in the USA

NYU Research Fellowship for Master of Science (including tuition remission, monthly stipend, and health insurance)

PUBLICATIONS

Yu, X., Ergan, S., & **Dedemen, G.** (2019). A data-driven approach to extract operational signatures of HVAC systems and analyze impact on electricity consumption. Applied Energy, 253, 113497. https://doi.org/10.1016/j.apenergy.2019.113497

Dedemen G., Vakilinezhad G., Ergan S. (2017) "Using Data Driven Methodologies to Identify Patterns in Building Automation System Data to Support Facility Operations", 2017 International Workshop on Computing in Civil Engineering, June 2017, Seattle, Washington (Accepted for Publication, Presented in IWCCE, in June 2017) https://ascelibrary.org/doi/10.1061/9780784480823.034

Dedemen G., Ergan S. (2017) "Towards Energy Efficient Operational Patterns in Air Handling Units in Highly Sensed Buildings", Proceedings of the International Workshop on Intelligent Computing in Engineering, July 2017, Nottingham, United Kingdom (Accepted for Publication, Presented in eg-ice 2017, in July 2017) https://www.nottingham.ac.uk/conference/fac-eng/eg-ice2017/documents/papers/24-abstract.pdf

Dedemen G., Ergan S. (2018), "Quantifying Performance Degradation of HVAC Systems for Proactive Maintenance Using a Data-Driven Approach", https://link.springer.com/chapter/10.1007%2F978-3-319-91635-4_25