UFUK SEN
CIVIL ENGINEER, MSC

Ankara/TURKEY
ufuk_sen@outlook.com

OBJECTIVE

As a graduate student, I specialized in earthquake engineering of dam bodies. However, during my time in the department of dams and hydropower plants, I had the opportunity to work extensively on spillways and outlet works. This experience allowed me to gain a comprehensive understanding of the subject matter, approaching problems from various angles and appreciating the bigger picture.

EDUCATION

Gazi University, Turkey **Doctorate (Present)**
GPA: 3.59 (current) – Dissertation: Probabilistic Performance Based Assessment of Earth-fill and Concrete Dams under Inertial Soil-Structure Interaction Effects

Louisiana State University, USA **Master's Degree (2018)**
GPA: 3.43 – Thesis: Risk Assessment of Concrete Gravity Dams under Earthquake Loads

Bulent Ecevit University, Turkey **Graduate (2013)**
GPA: 3.02

EXPERIENCE

Project Engineer **General Directorate of State Hydraulic Works of Turkey (DSI)**
NOV 2018 – PRESENT / ANKARA, TR
DEP. OF DAMS AND HYDROPOWER PLANTS
Checked reports prepared by private companies for accuracy and compliance with regulations:

- Determined place, type and size of spillways and outlet works based on topography, hydrology, type of dam, etc.
- Conducted hydraulic design of spillways and outlet work, (i.e., discharge capacity, flood routing, water surface elevation, cavitation, terminal structures design, etc.)
- Conducted optimization studies on spillway size vs. dam height & outlet work size vs. cofferdam height,
- Conducted structural analysis of spillways and outlet work including valve house (stability, static, reinforcement etc.)
- Utilized HecRAS analysis to assess dam sites,
- Conducted slope stability and tunneling assessments.

Control Engineer **DSI 233. Division**
AUG 2022 – FEB -2023 / BARTIN, TR
Inspected the construction stages of Flood Protection Structures for compliance with the project.

Field Engineer **Bahadir Engineering & Aras Construction Business Partnership**
SEP 2013 – FEB 2014 / ELAZIG, TR
Inspected the construction stages of prison, housing, workplace as parts of High Security Prison Construction Project for compliance with the project.

PUBLICATIONS

Sen, U., & Okeil, A. M. (2020). Effect of biaxial stress state on seismic fragility of concrete gravity dams. Earthquakes and Structures, 18(3), 285.

AWARDS

Awarded with a remarkable fellowship to study abroad by the Ministry of National Education of Turkey.

SKILLS

- Earthquake Engineering
- Dams and HPPs
- Spillways and Outlet Works
- Dynamic Analysis
- Finite Element Methods
- Structural Reliability

SOFTWARES

- ANSYS, SAP2000
- AutoCAD
- FLOW-3D, HecRAS
- MATLAB, Python

LANGUAGES

- IELTS (2017): 6.50/9.00
- YDS (2019) : 77.50/100