**UFUK SEN**
**CIVIL ENGINEER, MSC**

Ankara/TURKEY
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## OBJECTIVE

***(I will have a J2 visa)*** A Structural Engineer with a Master's degree specializing in the seismic analysis of concrete gravity dams. Offering 5 years of experience as a Project Engineer in the department of dams and hydro-power plants. Well-versed in hydraulic and structural design, with specific expertise in spillways, outlet works, and diversion tunnels.

## 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 – AUG 2022 / 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
Checked 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
Construction of prison, housing, workplace as parts of High Security Prison Construction 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 by the Ministry of National Education of Turkey with a remarkable fellowship to study abroad.

## 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