

## Curriculum Vitae

**Name and Surname:** Mehmet Firat Aydın

**Date of Birth:** 9 Şubat 1996

**Birthplace:** Sakarya

**Academic Title:** Research Assistant

**E-mail:** mehmetfirata@gmail.com

**Foreign Languages (Score and Year):** English (97.5 – 2021 YÖKDİL2) (85 – 2020 YDS)

**Field of Expertise:** Structural Engineering

Degree	Department/Program	University	Year
Bachelor's	Civil Engineering	Middle East Technical University	2020

### Master's Thesis and Thesis Advisor(s):

APPLICATION OF MACHINE LEARNING ALGORITHMS TO GENERATE SEISMIC FRAGILITY CURVES

Fragility curves are continuous curves showing the estimated probability of reaching or exceeding a pre-determined limit state that are used for determining the vulnerability of structures under earthquake excitation. Analytical approaches are generally preferred for the determination of the fragility function parameters in the literature. This generally requires great computational effort to satisfy adequate accuracy. In this study, machine learning tools will be implemented to obtain fragility functions that can reduce the number of performed dynamic analyses.

ADVISOR: Prof.Dr. ERBERİK MURAT ALTUĞ

### Projects and Titles:

**UDAP-Ç-2159 A Methodology for Assessment of Urban Seismic Resilience:  
Türkoğlu, Kahramanmaraş Case Study**  
*Project Scholar*