

Solutions for maintenance and for improving resilience of geotechnical infrastructures with respect to different types of fragilities.

Solutions for maintenance of geotechnical infrastructures and for improving their resilience with respect to local and global fragilities due to ageing, degradation, events and other natural and anthropic susceptibility factors. Possible tools for obtaining such results are: monitoring and sensing, data processing and diagnosis using artificial intelligence and digital twin technologies. The final aim of the research is to develop robust and possibly automated (or at least assisted) solutions for the maintenance of geotechnical infrastructures (tunnels, viaduct and bridge foundations, retaining structures) as well as methods for the assessment of the resilience at a network level.