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| Altri autori (Persone)  | TollD. G<br>ZhuHehua<br>LiXiaojun                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| Nota di contenuto       | Title page; Preface; Contents; Keynote Lectures; Innovation in Monitoring Technologies for Underground Structures; Integration of IT into Routine Geotechnical Design; Integration of Surface and Subsurface Data for Civil Engineering; Study on Shield Tunnel Database on Construction Data; The European Project ``Technology Innovation in Underground Construction" - Overview of IT Results; Artificial Intelligence and Data Mining; An Intelligent Rock Mass Classification Method Based on Support Vector Machines and the Development of Website for Classification<br>Application of Data Mining Techniques to the Safety Evaluation of Slopes<br>Application of Data Mining Techniques to Estimate Elastic Young Modulus Over Time of Jet Grouting Laboratory Formulations; Research of Modeling System for Soil Classification in Geological Reconnaissance Based APNN-RBF Neural Network; Probabilistic Evaluation of the Parameters Governing the Stability of the Tailing Dams; Research on |

Deformation Forecast of Deep Foundation Pit Based on Non-Equidistant Monitoring Data  
Research on Reasoning Mechanism of Emergency Rescue Decision Support System of Geo-Hazards Under the Conditions of Extreme Snow and Ice Disasters  
Using Artificial Neural Networks for Evaluation of Collapse Potential of Some Iraqi Gypseous Soils; Discussion About Data Mining Application in Civil Engineering Deformation Measurement Analysis; Data Acquisitions and Monitoring; 3D Reconstruction of Rock Cracks CT Image and Fractal Damage Study; Application of Geological Radar in Health Diagnosis of Nanjing Gulou Tunnel; The Development and Application of Automatic Monitoring System for Dam Seepage Development of Real-Time Soil Deformation Monitoring System (RSDMS)  
Diagnosis of Ginza Line Subway Tunnel, the Oldest in Asia, by Acquiring Data on Deterioration Indices; Exploratory Drilling with Recorded Parameters Using Wireless Technology; Information Monitoring on Surrounding Rock of Tunnel and Its Application; Mesoscopic Test Study of the Interface Between Geogrid Transverse Rib and Sand; The Application of Modified Gaussian Model in Hyperspectral Image Analysis; The Role of DInSAR Techniques in the Analysis of Ground Deformations Related to Subsidence and Landslide Phenomena  
A Study of Using Wireless Sensing Network (WSN) to Improve Tunnel Disaster Prevention and Rescuing Scheme  
Application of Two Different Temperature Monitoring Systems in Liquid Nitrogen Ground Freezing Construction; Detection of Tunnel Water Leakage Based on Image Processing; Data Standardization; Standardization and Digitization of the ISRM Suggested Methods on Rock Mechanics Tests; The STREAM's Testdefinition Facilitates Type of Test Independent Database Storage; Geological Modeling and Integration with Numerical Model  
Building a Geological Model of the Copenhagen Area Using HoleBASE, MIKE Geomodel and KeyHOLE

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### Sommario/riassunto

Information technology (IT) is now intrinsic to many aspects of our lives, and this is no less so for the field of geo-engineering, where it is widely used. This volume presents the proceedings of the First International Conference on Information Technology in Geo-Engineering in Shanghai, September 2010. The conference brought together engineers, scientists, researchers and educators to review new developments and IT advances in geo-engineering and provided a forum for the discussion of future trends. Information technology evolves constantly, and the innovative concepts, strategies and technol

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