

## CURRICULUM

### PROFESSIONALE

#### INFORMAZIONI PERSONALI

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Nome e Cognome Wenhui Yang

Nazionalità Cinese

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#### ISTRUZIONE E FORMAZIONE

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• Date (da - a) March 2021 - fino ad ora

- Nome e tipo di istituto di istruzione o formazione Sapienza Università di Roma, Roma, Italia  
Dipartimento di Ingegneria Chimica Materiali Ambiente
    - Principali materie / abilità professionali oggetto dello studio Finite Element, Modeling of Offshore Structures, Continuum Mechanics, Virtual element Method (VEM), Damage Mechanics and Modelling for Materials and Structures
  - Qualifica conseguita Visiting Ph. D student  
(La borsa di dottorato è stata soapersa a partire da febbraio 2022)
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• Date (da – a) September 2017 - now

- Nome e tipo di istituto di istruzione o formazione Southeast University, Nanjing, China  
Department of Underground Engineering, School of Transportation
    - Principali materie / abilità professionali oggetto dello studio Modern Soil Mechanics, Principles of Geoanalysis, Mathematical Model, Road Safety Design and EvaluationThesis topic: *Study on the mutual influence and protection strategy between subway tunnel and pile foundation construction*
  - Qualifica conseguita Ph. D. Candidates of Transport Engineering
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• Date (da – a) September 2014 - July 2017

- Nome e tipo di istituto di istruzione o formazione Chang'an University, Xi'an, China  
Department of Geotechnical Engineering, School of Highway
    - Principali materie / abilità professionali oggetto dello studio Numerical Analysis, Advanced Soil Mechanics, Elastoplastic Theory, Geotechnical Similarity Theory and Model Test, Mathematical Statistics and Stochastic ProcessesThesis topic: *Study on the Deterioration Mechanism and the Health Evaluation System of Loess Highway Tunnel Structure under Variable Load*
  - Qualifica conseguita Master's degree of Bridge and Tunnel Engineering
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• Date (da – a) September 2010 - July 2014

- Nome e tipo di istituto di istruzione o formazione Taiyuan University of Technology, Taiyuan, China  
Department of Underground Engineering, School of Mining Engineering
  - Principali materie / abilità professionali Fluid Mechanics, Rock Mechanics, Theoretical Mechanics, Elastic Mechanics, Materials Mechanics, Structural Mechanics,

oggetto dello studio Computational Mechanics, Engineering Geology  
Graduation Project: *Construction organization design of shield tunnel section from Puhuangyu Station to Fangzhuang Station of Beijing Metro Line 14*

- Qualifica conseguita Bachelor's degree of Urban Underground Space Engineering
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#### ESPERIENZA LAVORATIVA

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- Date (da – a) May 2020 – fino ad ora
  - Nome e indirizzo del datore di lavoro China Railway Fifth Survey and Design Institute Group Co., Ltd.
  - Tipo di impiego Interaction analysis between tunnels and pile foundation constructions and protection strategy
  - Principali mansioni e responsabilità Calibrate the developed numerical model based on the field data obtained in the actual project. Based on the calibrated numerical model, assess the influence of pile construction (incorporate a sensitivity analysis based on pile material, stagnation frequency, pile size, pile type, etc.), tunnel construction (incorporate tunnel size, buried depth, bridge and tunnel relative position, etc.) and various soil parameters by using Abaqus and Plaxis.
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- Date (da – a) June 2019 - February 2021
  - Nome e indirizzo del datore di lavoro Changzhou Rail Transit
  - Tipo di impiego Safety consulting, shield excavation numerical simulation
  - Principali mansioni e responsabilità Safety assessment and influence analysis of 3 proposed bridges on Existing Changzhou Metro Line 1 by using Abaqus
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- Date (da – a) July 2019-June 2020
  - Nome e indirizzo del datore di lavoro China Construction Eighth Engineering Division Co., Ltd.
  - Tipo di impiego Safety consulting, shield excavation numerical simulation
  - Principali mansioni e responsabilità Research on construction influence and deformation control of Nanjing-Jurong subway under-pass existing bridge and shallow foundation building by using Abaqus
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- Date (da – a) October 2017-January 2019
- Nome e indirizzo del datore di lavoro Yangzhou Tunnel Management Office
- Tipo di impiego Field monitoring, data analysis, numerical simulation
- Principali mansioni e responsabilità Conducted two years of on-site monitoring of Yangzhou Shouxihu Tunnel (14m large-diameter underwater shield tunnel), adopted Ansys to analyze the characteristics of lining deterioration, and

proposed the safety assessment method and control standards

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- Date (da – a) 2015-2017
  - Nome e indirizzo del datore di lavoro Gansu Provincial High-grade Highway Operation Management Center
  - Tipo di impiego Model testing, numerical simulation, safety consulting
  - Principali mansioni e responsabilità Conducted a series of large scale model tests to study the lining structure cracking process, and established a health evaluation system for loess tunnel under water immersion.
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#### **PUBBLICAZIONI**

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- 1 W. Yang, D. Zhang and A. Wang, Field measurement analysis of the influence of simultaneous construction of river channel and bridge on existing double shield tunnels, *Underground Space*, 2021, <https://doi.org/10.1016/j.undsp.2021.12.008>
  - 2 Yang Wenhui,Zhang Dingwen,Yan Qian,et al.Numerical analysis on stability of slope reinforced by combination of deep and shallow roots[J].*Journal of Southeast University (Natural Science Edition)*,2020,50(1):161-168. <https://doi:10.3969/j.issn.1001-0505.2020.01.021>
  - 3 Song, W.L., Lai, H.P., Liu, Y.Y., Yang, W.H., Zhu, Z.D., 2019. Field and laboratory study of cracking and safety of secondary lining for an existing highway tunnel in loess ground. *Tunnelling and Underground Space Technology* 88, 35-46. <https://doi.org/10.1016/j.tust.2019.02.018>
  - 4 Yang, W.H, Lai, H.P., Liu, Y.Y., Song, W.L. Study on the Health Evaluation System of Loess Tunnel Structure Based on Model Tests. the 1st International Conference on Exploration and Utilization of Underground Space, Accepted by Abstract Proceedings
  - 5 Yang, W.H., 2019. Numerical Analysis of Stability of Slope Reinforced by Combination of Deep and Shallow Roots[C]. *The Academic Seminar on Mechanical Properties and Engineering Practice of Soil Filling*, Taiyuan China, 2019).
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#### **CAPACITÀ E COMPETENZE**

##### **PERSONALI**

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<b>MADRELINGUA</b>	Cinese
Capacità di lettura	Eccellente
Capacità di scrittura	Eccellente
Capacità di espressione orale	Eccellente

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<b>ALTRE LINGUA</b>	Inglese
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Capacità di lettura	Buono
Capacità di scrittura	Buono
Capacità di espressione orale	Buono

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<b>ALTRE LINGUA</b>	Italiano
Capacità di lettura	Elementare
Capacità di scrittura	Elementare
Capacità di espressione orale	Elementare

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CAPACITÀ E COMPETENZE TECNICHE	Finite Element Analysis Abaqus, Plaxis, Python, Fortran
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