



curriculum vitae

PERSONAL INFORMATION

Surname	Zerbi
Name	Matteo
Address	
Telephone	
Fax	---
E-mail	
Skype	

Nationality	
-------------	--

Date of birth	
---------------	--

Education and training

• Date (from – to)	From November 2020
• Name and type of organisation providing education and training	POLITECNICO DI MILANO
Duration of the program of study	3 years
• Title of qualification awarded	PhD in Structural, Seismic and Geotechnical Engineering

• Date (from – to)	2017 -2019
• Name and type of organisation providing education and training	POLITECNICO DI MILANO
Duration of the program of study	2 years
• Principal subjects/occupational skills covered	Geotechnical modelling and design, underground excavations, foundations, slope stability, geotechnics for energy production, engineering seismology, computational mechanics, reinforced and prestressed concrete structures
• Title of qualification awarded	Master of science in Civil Engineering
Final mark obtained	110/110 with Honors

• Date (from – to)	2014 -2017
• Name and type of organisation providing education and training	POLITECNICO DI MILANO
Duration of the program of study	3 years
• Principal subjects/occupational skills covered	Soil mechanics, hydraulics, solid mechanics, structural analysis and design, hydraulic engineering, construction of road, railways and airport
• Title of qualification awarded	Bachelor of science in Civil Engineering
Final mark obtained	110/110 with Honors

• Date (from – to)	2009 -2014
• Name and type of organisation providing education and training	Centro Salesiano don Bosco Treviglio (BG)
Duration of the program of study	5 years
• Principal subjects/occupational skills covered	Basic topics in structural and geotechnical engineering, surveying, building and road design
• Title of qualification awarded	Technical high school diploma (“diploma istuto tecnico per geometra” in italian)
Final mark obtained	100/100 with Honors

graduation thesis

Title	DEM numerical analysis of impacts on granular strata
Language	English
Supervisor	Prof. Claudio Giulio di Prisco – Eng. Irene Redaelli
Thesis Summary	Falling rocks are common in the alpine areas. A better comprehension of the impact phase is necessary to improve our capability to predict the trajectory of the falling boulder and to improve the design methods for sheltering galleries. The prediction of the evolution of an impact is a particularly challenging problem in geotechnical engineering due to the multiplicity of factors influencing the response. The impact of spherical rock blocks on granular strata has been studied by employing a numerical approach based on discontinuous mechanics the Discrete Element Method, in order to understand the influence of the nature of the impacted material, of the inclination of the impacted stratum and of the initial conditions on the phenomenon. The results have been also used to validate the prediction obtained with an approach based on continuum mechanics the BIMPAM model, in the modified formulation proposed by Dattola et al. The capability of DEM to predict the evolution of the acceleration of the impacting boulder, both for inclined and vertical impacts is shown.

publications and articles submitted

Author(s) and title	Flessati L., Orfano M., Zerbi M., di Prisco C. Analisi dell'influenza della disposizione dei rinforzi sulla risposta meccanica di fronti di gallerie realizzate in materiale coesivo.
Language	Italian
Publication place	Incontro Annuale dei Giovani Ingegneri Geotecnici (IAGIG)
Date of publication	2018

Author(s) and title	Di Prisco C., Redaelli I., Zerbi M. Inclined block impacts on granular strata: DEM-FDM numerical results and rheological modelling.
Language	English
Publication place	International Journal of Rock Mechanics and Mining Sciences (submitted under review)
Date of publication	2022

certifications

GRE	
GMAT	
Certifications of language knowledge	TOEIC 885/1000 PET – Pass with Merit

Work experience, stages, studies abroad

• Date (from – to)	2020 – On going
• Name and address of firm/university	POLITECNICO DI MILANO – DIPARTIMENTO DI INGEGNERIA CIVILE E AMBIENTALE Piazza Leonardo da Vinci, 32 Milano
• Type of business or sector	Teaching
• Main activities and responsibilities	Teaching assistant for the course “Geotecnica” (6 CFU) – prof. Irene Redaelli - Scuola di Architettura, Urbanistica, Ingegneria delle Costruzioni – Academic year 2020-2021 and for the course “Slope Stability” (10 CFU) – prof. Claudio di Prisco - Scuola di Ingegneria Civile, Ambientale e Territoriale

• Date (from – to)	2020
• Name and address of firm/university	POLITECNICO DI MILANO – DIPARTIMENTO DI INGEGNERIA CIVILE E AMBIENTALE Piazza Leonardo da Vinci, 32 Milano
• Type of business or sector	Research in geotechnical engineering
• Type of employment	Research assistant
• Main activities and responsibilities	Execution of impact tests with a numerical DEM code, simulation with the numerical code of rebound and impact with protection structures and development of an interaction model rigid block-soil for the design of reinforced embankments – Supervisor prof. Claudio di Prisco

• Date (from – to)	2019 – 2019
• Name and address of firm/university	POLITECNICO DI MILANO – DIPARTIMENTO DI INGEGNERIA CIVILE E AMBIENTALE Piazza Leonardo da Vinci, 32 Milano
• Type of business or sector	Research in geotechnical engineering
• Type of employment	Curricular internship
• Main activities and responsibilities	Realisation of a Montecarlo analysis through the FEM code ABAQUS in order to study seepage under an impervious dam taking into account the void ratio as a random variable and permeability as function of the void ratio – Supervisor prof. Cristina Jommi

• Date (from – to)	2014 – 2018
• Name and address of firm/university	RU-STEEL ITALIA srl Via Ugo la Malfa, 25 Melzo (MI)
• Type of business or sector	Mechanical engineering – Production of transmission couplings
• Type of employment	Occasional collaborator of the technical office
• Main activities and responsibilities	Realisation of assembling rules and technical sheet for catalog products and executive drawings for special couplings, inventory and business promotion

Personal skills and competences

Acquired in the course of life and career but not necessarily evidenced by formal certificates and diplomas.

Mother tongue

Italian

Other language(s)

English

- reading
- writing
- speaking

Excellent
Good
Good

French

- reading
- writing
- speaking

Elementary
Elementary
Elementary

Social skills and competences

Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (e.g. Culture and sports), etc.

Capability of actively and effectively interact with everyone, in multidisciplinary and multicultural environments, developed in my experience as a City Counselor in Gessate (MI) from May 2019 and during the collaboration with the mechanical company RU-STEEL ITALIA srl.

Organisational skills and competences

E.g. coordination and management of people, projects and budgets; at work, in voluntary work (e.g. culture and sports) and at home, etc.

Leadership and team management developed in my over 5 years as a civil protection volunteer specialised in hydrogeological risk and my experience as an assistant volleyball coach in Serie C.

Technical skills and competences

With computers, specific kinds of equipment, machinery, etc.

- Excellent knowledge of DEM code PFC, good knowledge of FEM codes ABAQUS and MIDAS GTS NX, good knowledge of Finite Difference Method code FLAC and Material Point Method code ANURA3D
- Excellent knowledge of MATLAB software
- Good knowledge of GEOSLOPE – slope stability analysis software
- Excellent knowledge of Autocad and basic knowledge of Revit
- Basic knowledge of Photoshop and GIMP

Artistic skills and competences

Music, writing, drawing etc.

Basic piano knowledge

Other skills and competences

Competences not mentioned above.

Sense of organisation and analysis of priorities in order to be always on the ball in my different activities.

Additional information

- Professional qualification as Civil and Environmental Engineer – Section A from July 2020
- Attendance to the doctoral school “Meccanica Computazionale e applicazioni all’Ingegneria Geotecnica” organised by Gruppo Nazionale di Ingegneria Geotecnica (July 2019)
- Attendance to the module 10 “Tecniche di rinforzo: materiali e soluzioni” of the II level master in Tunnel Engineering organised by Politecnico di Milano – DICA (April 2019)
- Attendance to the summer school “Progettazione e Realizzazione di Rilevamenti topografici” organised by Politecnico di Milano – DICA (September 2016)

- Autorizzo al trattamento dati ai sensi del GDPR 2016/679 del 27 aprile 2016 (Regolamento Europeo relativo alla protezione delle persone fisiche per quanta riguarda il trattamento dei dati personali).

- Autorizzo la pubblicazione del Curriculum Vitae sul sito istituzionale del Politecnico di Milano (sez. Amministrazione Trasparente) in ottemperanza al D.Lgs n. 33 del 14 marzo 2013 (es.m.i.).

A handwritten signature in black ink, reading "Matteo Ferli". The signature is written in a cursive, flowing style. The first name "Matteo" is written in a larger, more prominent script, and the last name "Ferli" is written in a slightly smaller, more compact script to its right.