

Curriculum Vitae

Personal information



Name: Mohammad Mohinuddin Ahmed
Date of birth: 01 November 1987
Nationality: Bangladeshi
Address: Via Salvatore Pincherle
House No: 179,
Appartment: 15
00146, Rome, Italy
Italian fiscal code HMDMMM87S01Z249P
Telephone: +393884599162
E-mail: mohammadmohinuddin.ahmed@uniroma3.it
ahmed.1880368@studenti.uniroma1.it
moin4cuet@gmail.com

Education

Academic year 2018-2019 Master, II level Master in Geotechnical Design
Internship Nov-2019-Jan-2020 University of Rome “La Sapienza”, Rome, Italy
Major: Geotechnical Engineering
Training course: Geotechnical characterization of soils and rocks.
Geotechnical modeling, Design of foundations,
Design of tunnels, underground and earthworks,
Design of landslide slope stabilization
Project Title: Economic and Technical Feasibility Study of the
Bradano Rail Tunnel Project.
Project advisor: Prof. Eng. Salvatore Miliziano

December 2013 Master, Disaster & Environmental Engineering
CUET, Chittagong, Bangladesh
Major: Structural & Geotechnical Engineering
Thesis Title: Seismic Vulnerability Assessment of Building and
Application of Hyde-System for Retrofitting.
Thesis advisor: Prof. Dr.Md Jahangir Alam

July 2010 Bachelor, Civil Engineering, CUET, Chittagong, Bangladesh
Major: Structural Engineering
Thesis Title: A Study on the Deterioration of Concrete
in NaCl Environment.
Thesis advisor: Prof. Dr. Saiful Islam

Working Experience

September 2019 Teaching Assistant
October 2019
Employer: University of Rome “La Sapienza”, Rome, Italy.
Department: Structural & Geotechnical Engineering
Main activities: **Prepare teaching materials.**

Preparation of teaching materials in English of the Master in Geotechnical Design from Italian: geotechnical modelling modules, design of foundations and design of tunnels.

**November 2015-
August 2018**

PhD Research Fellow

Employer: Roma Tre University, Rome, Italy.

Department: Structural Engineering

Main activities: **Research**

Dynamic modelling and experimental testing of structures

Seismic response analysis of structures

Performance-based design and assessment of structures

Probabilistic based assessment of structures

Conduct research in seismic fragility analysis of refinery piping systems at component level (botlage-joint,elbow,tee etc) and global level (rack-piping system).

**February 2013
October 2015**

Structural Engineer

Employer: Uttaron Technologies., Dhaka, Bangladesh

Main activities: **Structural Design Engineer**

Structural calculations and dimensioning of steel reinforced concrete structures

Stability analyses of concrete structures

Review of civil engineering documentation produced by the engineering contractor.

Verification and approval of calculation reports relating to foundations and structures (both in concrete and steel).

Verification of civil works (Foundations,) and structures (both in concrete and steel).

Verification of architectural, structural and systems related to plant buildings.

Pre-sizing and estimation of MTO and BOQ quantities in the estimation phase, BBS verification and calculation of materials in the executive phase.

Technical follow-up of the site returns that will emerge from the construction contractor (eg site technical query reply, field design change, technical solutions to solve NCR, etc).

October 2012

Research Stay

January 2013

Employer: University of Kassel, Kassel, Germany
Department: Steel and Composite Structures
Main activities: **Research**
Dynamic modelling of structures
Seismic response analysis of structures
Performance analysis of HYDE-System for retrofitting

May 2011

Lecturer

September 2012

Employer: University of Information Technology & Sciences (UITS), Chittagong, Bangladesh.
Department: Civil Engineering
Main activities: **Teaching**
Prepare course outline, course calendar, lesson plan, tutorial and schedule for the student and conduct theoretical, tutorial and practical classes, extension teaching, related research .

Skills

Programming Language: TCL, FORTRAN77, C++ and Python
Mathematic tools: Matlab, Mathematica and Mathcad
FEA tools for structural analysis: Open Sees, Sofistik, Robot, Revit Structure, ANSYS 10, ABAQUS, Etabs-2015, Sap2000v17, Staad/Staad Foundations, Tekla, MidasGen, SAFE, CSI Col, Perform3D, Response2000 and DYANAS.
FEA tools for Offshore Structural analysis: SESAM software package, NX Nastran, Simcenter 3D
Piping stress analysis tools: TRIFLEX, CAESAR II, and Auto PIPE.
Tools for geotechnical Engineering: Plaxis 3D, Flac (2D &3D), OptumG2, OptumG3, RocLab, Rocscience.Dips, RS2, RS3, Visual Slope.
Geographic data analysis : GIS
CAD Programme for modeling tool: Auto Cad 2016 (2D &3D) and Auto Cad Plant 3D, Revit
Tool for reliability and Probabilistic analysis: FERUM 2.2., UQLab V1.2
Construction project management (CPM) : Procure, GenieBelt, Corecon
Seismic ground motion analysis tool: STRATA ,SIMQKE-I, SIMQKE-II and OPENSIGNAL
General IT skills: Competent with most Microsoft Office programmed (Outlook, Word, Excel, PowerPoint) and experience with HTML, Adobe Photoshop, Acrobat

Knowledge of Technical Standards & Codes

Structural technical standards and codes : AISC, ACI, IBC, ASCE , ASTM, Euro code ,etc.
Pipe technical standards and codes: ASME B31.1, DNV-OS-F101, ASCE 3,EN 13480-3,CSA-Z662,

Languages

Bengali (Native language)
English (Level B2) International English Language Testing System (IELTS), 2014
Over all Band Score: 6.0
German (Level A2) Teilnahmebestätigung A2, Die Sprache, Chittagong, Bangladesh,2012
Italian (Level A1) Attestato A1, Roma Tre University, Rome, Italy, 2016

Memberships

Member of the Institution of Engineers Bangladesh (IEB) (Authorized body to provide work licenses to engineers of all disciplines graduated in Bangladesh after examinations)-since 2010

Member of the SIG - Società Italiana Gallerie-The Italian Tunnelling Society-since 2019

Member of the Bangladesh Earthquake Society (BES)-since 2012

Awards

October 2012 German Academic Exchange Service (DAAD) sponsor four months for research stay at University of Kassel (UNIKA), Germany
June 2012 Comprehensive Disaster Management Program (CDMP), Bangladesh grants for excellent master thesis.
June 2011 Confidence Cement and GPh-Ispath, Bangladesh Scholarship for securing the first position, first semester in M.Sc. at CUET
March 2007 Metro pole Scholarship, Bangladesh for excellent result in BSc in civil engineering at CUET.
December 2006 Bangladesh Government Technical Scholarship for the top student for 4 year BSc in civil engineering at CUET.

Journal Publications

[J1] **Mohammad Mohinuddin Ahmed**, Israt Jahan, Dr. Md. Jahangir Alam (2014). "Earthquake Vulnerability Assessment of Existing Buildings in Cox's-Bazar Using Field Survey & GIS." International Journal of Engineering Research & Technology (IJERT) Vol. 3 Issue 8, August – 2014, pp. 1147-1156.

Conference Publications

[C2] Caprinuzzi S, **Mohammad Mohinuddin Ahmed**, Paolacci F, Bursi O.S., La Salandra V. "Univariate Fragility Models for Seismic Vulnerability Assessment of Refinery Piping Systems," PVP2017-65138, Proceedings of the ASME 2017 Pressure Vessels and Piping Conference, PVP2017, July 16-20, 2017, Waikoloa, Hawaii, United States of America.

[C1] **Mohammad Mohinuddin Ahmed**, Md. Jahangir Alam and Ing Uwe.E Dorka (2013). “Seismic Vulnerability Assessment of Concrete Pile Foundation”. In the proceedings: The 3rd International Conference on Engineering and Applied Sciences (2013 ICEAS), 7-11-2013 to 9- 11-2013, Osaka, Japan. pp. 1178-1184

Upcoming Publications

[UP2] **Mohammad Mohinuddin Ahmed**, Fabrizio Paolacci “A simple equivalent straight elbow model in nonlinear under strong cyclic loading”. (Abstract attached, full paper available on request)

[UP1] **Mohammad Mohinuddin Ahmed**, .E.Brunesi,R.Nascimbene, Paolacci F, “Seismic Fragility of a pipe-rack based on incremental dynamic analysis”.

Small-scale long span cable-stayed bridge models for teaching, bachelor and school students

As a lecturer at UITS Chittagong, a family of small-scale long span cable-stayed bridge is designed, constructed, and subjected to educational earthquake/wind engineering experiments attended by students. Based on a long span cable-stayed bridge prototype, two kinds of excitations, harmonic and white noise excitation, applied respectively in the lateral direction of the bridge. Effort is put into achieving realistic vibration characteristics in the models.

Training and Seminar Attended

1. Seminar on "Conventional Geotechnical Monitoring",– organized in Rome, Italy, September 30, 2019, offered by Eng. Filippo Soccodato (IAT),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
2. Seminar on “Strategies for rock slope instability - stabilization, removal (blasting)”, “Impact mechanics - application to rock fall modelling”, “Rock fall protection structures - Attenuator nets and concrete rock sheds”, “Seismic stability of rock slopes - Pseudo-static and Newmark displacement analyses”, – organized in Rome, Italy, September 24 & 26, 2019, offered by Eng. Duncan C. Wyllie (Wyllie & Norrish Rock Engineers),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
3. Seminar on “Challenging Ghella’s experiences in Mechanized tunnelling”,– organized in Rome, Italy, September 20, 2019, offered by Eng. Giovanni Giacomini (Ghella SpA),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
4. Seminar on “Challenging Ghella’s experiences in Mechanized tunnelling”,– organized in Rome, Italy, September 20, 2019, offered by Eng. Giovanni Giacomini (Ghella SpA),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
5. Seminar on “Select case histories deal with the design and construction of tunnels for roads, railways and metropolitans: soil and rocks - conventional and mechanized tunnelling - loosening, squeezing and swelling ground - new development in yielding support”,– organized in Rome, Italy, September 17 &18, 2019, offered by Prof. Kalman Kovari (ETHZurich),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
6. Seminar on “Design and construction of large diameter tunnels”,– organized in Rome, Italy, September 5, 2019, offered by Eng. Giovanna Cassani (RockSoil),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
7. Seminar on “The ADECO-RS approach to the design and construction of tunnels with industrial criteria”,– organized in Rome, Italy, July 25, 2019, offered by Prof. Dott. Ing. Giuseppe Lunardi, RockSoil, from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
8. Seminar on “Shotcrete Technology for Civil Engineering”, “Waterproofing systems for Civil Engineering works (Tunnels and cut and cover structures)”, – organized in Rome, Italy, July 10, 2019 , offered by Geol. Oscar Marazzini & Eng. Yves Boissonnas, SIKA Group ,from La Sapienza University of Rome, Dept. of Structural and Geotechnical

Engineering.

9. Seminar on “Metropolitan line design criteria.”, “Metropolitan station design criteria.”, – organized in Rome, Italy, July 08 & 09, 2019, offered by Eng. Antonio Zechini, from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
10. Seminar on “Jet grouting: technology and effects: Introduction”, “Jet grouting: monitoring, control and design”, “Application and design examples” – organized in Rome, Italy, July 04,05 & 08, 2019, offered by Prof. Eng. Giuseppe Modoni, Università degli studi di Cassino e del Lazio Meridionale from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
11. Seminar on “Introduction to Cost and Benefit Analysis and Economic and Social Impact Assessment for major infrastructure projects”, – organized in Rome, Italy, June 28, 2019, , offered by Eng. Valerio Gori & Eng. Diego Artuso, PwC ,from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
12. Seminar on “Soil improvement by low pressure injections”, – organized in Rome, Italy, June 24, 2019, , offered by Eng. Geol. Ilario Bridi (freelance),from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
13. Seminar on “Fundamentals of Soil–Foundation–Structure interaction”, “Dynamics of Shallow Foundations through case histories”, “Pile foundations: inertial and kinematic response” “Seismic case histories with pile foundations” – organized in Rome, Italy, June 13 & 14, 2019, offered by Prof. Eng. George Gazetas, University of Athens from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
14. Seminar on “Shear strength of liquefied soil and its use in engineering practice” – organized in Rome, Italy, 10 April, 2019, offered by Prof. Jonathan P. Stewart, Department of Civil & Environmental Engineering, UCLA, USA from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering.
15. Short course in “Geotechnical Earthquake Engineering” – organized in Rome, Italy, February 8, 2019 to March 30,2019, offered by Prof. Giuseppe Lanzo, from La Sapienza University of Rome, Dept. of Structural and Geotechnical Engineering
16. Seminar on “Dynamical damage and phase-field fracture models” – organized in Rome, Italy, 25 July ,2018, offered by Prof. Tomas Roubicek, from Mathematical Institute, Charles University ,Czech Republic.
17. International workshop on “Cyclic Behavior of Corroded Rebars in RC Structures” – organized in Roma Tre University, 10 May 2018, offered by Prof. Mehdi Kashani, from Structures, Design and Earthquake Engineering at University of Southampton, UK.
18. Short Course on “Computational methods for the seismic assessment of structures”, Rome, Italy,18-22 September, 2017, offered by Prof. F. Paolacci, Prof. M. Fragiadakis and Prof. L. Di Sarno.
19. Seminar on “Development of a new analytical model for evaluating the tank rocking motion- considering response discontinuity and non-inertial forces” – organized in Rome, Italy, 15 September, 2017, offered by Prof. Tomoyo Taniguchi from University of Tottori.
20. 1st International Summer School on “Mechanics and Performance of Resilient Structures and Infrastructures” organized in Trento on 03-07 July 2017, offered by Prof. F. Paolacci, Prof. Oreste S. Bursi, Prof. Matjaz Dolsek, Prof. Paolo Gardoni and Prof. Dimitros Vamvatsikos.
21. Seminar on “Design and Construction of the Tsakona Arch Bridge” organized in Rome, Italy, 09, June, 2017, offered by Dr. Kyriakos Stathopoulos.
22. Seminar on “Research on Multiscale and Multiphysics” organised in Rome, Italy, 20 April, 2017, offered by Prof. Kwon del Dept. of Mechanical & Aerospace Engineering Naval Postgraduate School, USA.
23. Virtual Conference: ASME B31.3 Process Piping Webinar - April 3, 2017, New York, NY, USA.
24. Training course on “Seismic Analysis of RC Structure using Opensees” at Department of Engineering of the Roma Tre University, 17 February 2017, Rome.
25. On 19 and 20 december, 2016, under the leadership of Roma Tre University at ENEA Casaccia Research Centre, Italy, experimental tests carried out to investigate the seismic

behavior of full scale masonry walls through shake table tests for stone masonry and tuff blocks.

26. Seismic Design of Steel Building Structures Using ETABS & SAP2000 held at Institution of Engineers Bangladesh (IEB), Dhaka, Bangladesh on June 03-05, 2015.
27. Computer Aided Drafting 2D & 3D (CAD Programme) held at Institution of Engineers Bangladesh (IEB), Chittagong, Bangladesh on July 28, 2009 - September 30, 2009.

Technical Visit

[T1] Technical visit at the tunnel construction sites of the C line of the Rome Metro (Amba Aradam) on (12/02/2019, 12/07/2019 and 24/07/2019) for EPB-TBM. (<http://metrospa.it/visita-tecnica-per-gli-allievi-del-corso-master-di-ii-livello-in-progettazione-geotecnica/>)

[T2] Technical visit for the geotechnical field test on (27/03/2019) at Piazza Augusto Imperatore by Geoter S.r.l.

[T3] Technical visit for Sandstone quarries on field on (11/04/2019) at Monte Cimbalò in Tarquinia (VT) by Tarquinia cave S.r.l.

[T4] Technical visit at the tunnel construction sites of Anas construction site on SS4 (Salaria, Trisungo Acquasantana) (18/07/2019) for Conventional Tunnelling Method.

Educational Visit

[E1] Educational visit at the tunnel construction sites of the Brenner Base Tunnel at Brenner (Hinterrigger - Isarco – Mules) on (10/09 /2019) for underpass construction site of the river Isarco. (<https://web.uniroma1.it/masterprogeo/en/node/5840>)

[E2] Educational visit at the tunnel construction sites of M4 construction site in Milan city on (11/09 /2019) for TBM clearance area and - Tricolore station (TBM node) and TBM visit.

[E3] Educational visit at the tunnel construction sites of Terzo Valico dei Giovi at Genova on (12/09 /2019) for traditional method with drill and blast excavation, TBM, segment construction premise area.

[E4] Educational visit at the tunnel construction sites of the Variante di Valico (Barberino de Mugello) at Florence, on (13/09 /2019) for EPB-TBM visit.

Hobbies

Swimming, Travelling, Soccer

References

Reference in personal

Name: Prof. Eng. Salvatore Miliziano

Email: salvatore.miliziano@uniroma1.it

Mobile Cell: +393351298229

Address:

Sapienza Università di Roma - Facoltà di Ingegneria Civile e Industriale

Dipartimento di Ingegneria Strutturale e Geotecnica, Via Eudossiana, 18 – 00184 Roma

Master in Progettazione Geotecnica: +39 (0)6 44585947, +39 3351501206, +393290570703

masterprogeo@uniroma1.it, web of master: <http://w3.disg.uniroma1.it/masterprogeo/>

Reference in online

Website	Description
https://www.linkedin.com/in/mohinuddin-ahmed-09649622/	<i>Linkedin</i>
https://cuet.academia.edu/MohinuddinAhmed	<i>Academia</i>
https://www.researchgate.net/profile/Mohammad_Ahmed29	<i>Researchgate</i>
https://web.uniroma1.it/masterprogeo/en/node/5840	MASTER 2018-2019 VII Edition of II Level Master Geotechnical Design Design & Management of Geotechnical and Major Underground Projects
https://www.romatrestrutture.eu/people/	Structures Research Group of Roma Tre University
https://r.unitn.it/en/dicam/xp-resilience/training-activities	1st International Summer School on Mechanics and Performance of Resilient Structures and Infrastructures, Trento, Italy, 03-07 July 2017.
https://r.unitn.it/en/dicam/xp-resilience/training-activities	Computational methods for the seismic assessment of structures, Rome, Italy, 18-25 September 2017
http://www.uni-kassel.de/fb14bau/de/institute/iki/stahl-und-verbundbau/lehre/sean-dee/medium-term-students.html	Presentation of medium term students in front line research stay for 3-5 months within South-East Asia educational Network for Disaster and Environmental Engineering with the help of a DAAD grant. Seismic Vulnerability Assessment of Buildings and Application of Hyde-System for Retrofitting (master thesis)