


CURRICULUM VITAE

■ Educational Details

Name	SYED MUHAMMAD TURAB HAIDER JAFRI			
Date of Birth	5 th November, 1988	Nationality	Pakistani	
Address	625 (1 st floor), Gali 2, I-9/1, Islamabad, Pakistan	E-mail	turabjafri@nice.nust.edu.pk	
Office	113, NIT Building, NUST H-12, Islamabad, 44000, Pakistan	Phone	Cell: +92-346-5370460 Office: +92-51-90854634	
Career				
Period (YYYY/MM)	Organization		Position	
2018.08 ~ Present	National University of Sciences and Technology (NUST), Pakistan		Assistant Professor	
Education				
Period (YYYY/MM)	University	Degree	Major	
2008.09 ~ 2012.07	University of Engineering and Technology (UET) Taxila, Pakistan	BSc.	Civil Engineering	
2013.09 ~ 2018.08	Hanyang University, South Korea	MS/PhD	Geotechnical Engineering	
PhD Dissertation Topic	<p style="text-align: center;"><i>Proposing optimum borehole spacing for a non-vibrational rock splitting method using discrete element modeling</i></p> <p>- Numerical analysis of a non-vibrational rock splitting method for tunnel excavation using PFC^{2D} code in order to undergo economical and efficient construction process - Suggestion of increased borehole spacing values considering rock strength, borehole depth, and splitting width of the machine.</p>			

■ Teaching Experience

No.	Course Name	Institution	Class
1	Geotechnical Site Investigation	NUST, Pakistan	MSc.
2	Soil Mechanics	NUST, Pakistan	BSc.
3	Rock Mechanics	NUST, Pakistan	MSc.
4	Soil and Site Improvement	NUST, Pakistan	BSc., MSc.
5	Design and Construction of Earthen Dams	NUST, Pakistan	BSc., MSc.

■ Experience in Numerical Simulation

No.	Commercial Software	Purpose
1	FLAC 7.0	Stability analysis of tunnels
2	PFC 4.0	Fracture propagation in rock based on strength parameters

■ Research Papers

No.	Title	Journal	Publication Date	Role	Impact Factor
1	Analysis of trench slope stability in permafrost regions according to the vertical and horizontal angle of slope	Journal of the Korean Institute of Gas	2017.02	co-author	-
2	Stability analysis of an existing utility tunnel due to the excavation of a divergence tunnel emerging from double-deck tunnel	Journal of Korean Tunnel and Underground Space Association	2017.03	co-author	-
3	Analysis of trench slope stability in permafrost regions according to the equipment load	Journal of the Korean Institute of Gas	2017.06	co-author	-
4	REV application in DEM analysis of non-vibrational rock splitting method to propose feasible borehole spacing	Applied Sciences	2018.02	First author	IF: 2.217 SCI(E)
5	Effects of different tunnel design approaches on rock mass behavior during tunnel widening	Heliyon	2019.12	co-author	-
6	Rock mass behavior under tunnel widening in asymmetric and symmetric modes considering different shapes and parametric conditions	Geosciences	2019.12	co-author	-

■ Conference Papers

No.	Title	Conference	Publication Date
1	Structural analysis of composite support for the tunnel design	World Tunnel Congress 2016, San Francisco, USA	2016.04
2	A study on physical model tests simulating different excavation methods	Korean Society of Civil Engineers (KSCE) 2016 Convention, Jeju Island, South Korea	2016.10
3	Proposing feasible borehole spacing in non-vibrational rock splitting method using discrete element modeling	International Conference on Tunnels and Underground Space (ICTUS), Ilsan, South Korea	2017.08
4	Proposing allowable volume loss caused by the combined effects of excavation and groundwater depression for risk management of adjacent buildings	World Tunnel Congress 2018, Dubai, UAE	2018.04
5	Effect of symmetric and asymmetric widening of tunnel on rock mass behavior in various rock types and in situ stress state	7 th Annual International Conference on Architecture and Civil Engineering (ACE 2019), Singapore	2019.05
6	Effect of multiwalled carbon nanotubes on unconfined compressive strength and shear strength parameters of soil	15 th International Conference on Geotechnical Engineering, Lahore, Pakistan	2019.12