

# UMME AMINA MANNAN, E.I.T.

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## Education

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- PhD with distinction**, Civil Engineering (Concentration: Pavement Materials) 2017  
University of New Mexico, Albuquerque, NM GPA 4.00/4.00  
*Dissertation: "Characterization of Asphalt Healing and Incorporation in A Fatigue Damage Model"*
- Master of Science**, Civil Engineering (Concentration: Recycled Materials) 2012  
University of Akron, OH GPA 3.953/4.00  
*Thesis: "Effect of Recycled Asphalt Shingles (RAS) on Physical and Chemical Properties of Asphalt Binders"*
- Bachelor of Science**, Civil Engineering 2009  
Bangladesh University of Engineering & Technology, Dhaka, Bangladesh GPA 3.64/4.00  
*Thesis: "Analytical Study of Horizontally Curved Bridge Deck by STAAD.Pro"*

## Professional License

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**Engineer Intern (EI)**, Ohio Board of Registration for Professional Engineers and Surveyors 2012

## Professional Experiences

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- University of New Mexico** August 2012–December 2017  
Research Assistant Albuquerque, NM
- University of Akron** August 2010–August 2012  
Research Assistant Akron, OH
- Design Develop Build Ltd.** 2009–2010  
Junior Project Engineer Dhaka, Bangladesh

## Teaching Experiences

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- University of New Mexico** Fall 2017  
Instructor(Mechanics of Materials) Albuquerque, NM
- University of New Mexico** Spring 2015  
Instructor(Mechanics of Materials) Albuquerque, NM
- University of Akron** Spring 2012  
Teaching assistant (Soil Mechanics Lab) Akron, OH
- University of Akron** Fall & Spring 2011  
Teaching assistant (Solid Mechanics) Akron, OH
- University of Akron** Fall 2010  
Teaching assistant (Soil Mechanics) Akron, OH

## Honors, Grants & Awards

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- *APANM Best Poster Award*, Asphalt Pavement Association of New Mexico, NM (2017)
- *UNM Civil Engineering Scholarship*, University of New Mexico, NM (2017)
- *Best Paper Award*, 6th International Conf. on Geotechnique, Construction Materials & Environment, Bangkok, Thailand (2016)
- *APANM Asphalt Industry Scholarship*, Asphalt Pavement Association of New Mexico (2016)
- *UNM Civil Engineering Travel Grant*, University of New Mexico (2016 & 2015)
- *Elvidio V. Diniz, P.E. UNM Water Resources Scholarship*, New Mexico Section of ASCE (2015)
- *Student Research Grant (SRG)*, Graduate & Professional Student Association, University of New Mexico, NM (2014)
- *Technological Scholarship* (award for excellence in engineering education), Govt. of Peoples' Republic of Bangladesh (2008)
- *Academic Achievement Scholarship* (award for excellent result), Bangladesh University of Engineering & Technology, Dhaka, Bangladesh (2007)

## Computer & Software Skills

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- **Pavement Design:** AASHTOWare, WinJULEA, KENPAVE, KENLAYER, LTPP
- **Traffic Simulation:** VISSIM
- **Highway Design:** AutoCAD, Civil 3D, MicroStation
- **Miscellaneous:** ArcGIS, Matlab,  $\LaTeX$
- **FEM Software:** STAAD, ABAQUS, SAP
- **Microsoft Office:** Word, Excel, Access, PowerPoint, Project
- **Statistics:** RStudio, SPSS

## Volunteer Services

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- **Reviewing Services:** Applied Rheology, Journal of Testing and Evaluation, Transportation Research Board (TRB), Canadian Journal of Civil Engineering
- **Arranged Workshops:** Introduction To Rheology with Anton-Paar (2015), Asphalt Binder extraction and recovery (Rotavapor) for NMDOT (2014), DSR Testing for NMDOT (2014)

## Professional Affiliations

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- Society of Women Engineers (SWE)
- American Society of Civil Engineers (ASCE)
- Engineers Without Borders UNM (EWB-UNM)