# Md Mintu Miah, MS

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## ACADEMIC APPOINTMENTS

University of Texas at Arlington, USA	
Doctoral Research Assistant, Department of Civil Engineering	June 2019-Present
University of Texas at Arlington, USA	
STEM Graduate Teaching Assistant, Department of Civil Engineering	Jan 2019-August 2019
University of Hawaii at Manoa, USA	
Graduate Research Assistant	Aug 2017-Dec 2018
Rajshahi University of Engineering and Technology, Bangladesh	
Assistant Professor	Apr 2017-July 2017
Rajshahi University of Engineering and Technology, Bangladesh	
Lecturer	Feb 2014-Mar 2017
Stamford University, Bangladesh	
Lecturer	Sep 2013-Jan 2014
World University, Bangladesh	
Lecturer	May 2013-Aug 2013

# **EDUCATION**

Ph.D. in Civil Engineering (Transportation)	In progress
University of Texas at Arlington, Texas, USA	
Dissertation: Data Fusion for Non-Motorized Volume Estimation: A Machine	
Learning Approach	
Advisor: Stephen P. Mattingly, Co-Advisor: Kyung Kate Hyun	
M.S. in Civil and Environmental Engineering (Transportation)	Dec2018
University of Hawaii at Manoa, Hawaii, USA	
Dissertation: Effects of Reading Text While Driving Analysis of 200 Honolulu	
Taxi Drivers on a VS500m Simulator	
Advisor: Panos D. Prevedouros	
B.S. in Civil Engineering	Oct 2012

#### Rajshahi University of Engineering and Technology, Rajshahi, Bangladesh

Dissertation: Numerical Analysis of Coupled Shear Wall for Drift Control Advisor: Tohur Ahmed

# **RESEARCH EXPERIENCE**

#### **Graduate Student Researcher**

#### University of Texas at Arlington, Texas, USA

- Exploring Data Fusion Techniques to Derive Bicycle Volumes on a Network, PI: Hyun Kate, Co-PI: Stephen Mattingly, Sponsor: USDOT/ National Institute for Transportation and Communities
- Analyze the Use of Green Pavement Markings Intersection Safety for Non-Motorized Users, PI: Stephen Mattingly, Co-PI: Hyun Kate, Sponsor:TXDOT
- Characterizing Handitran and Via Users: A Comparative Analysis of the Riders and Their Travel Patterns, PI: Hyun Kate, Co-PI: Stephen Mattingly, Sponsor: City of Arlington
- Exploring the Use of Crowdsourced Data Sources for Pedestrian Count Estimations, PI: Hyun Kate, Co-PI: Stephen Mattingly, Sponsor: USDOT/ National Institute for **Transportation and Communities**
- ✤ Air Quality Monitoring Strategies and Modeling of Chronic Health Risks Related to Traffic-Related Air Pollution, PI: Stephen Mattingly, Co-PI: Hyun Kate, Sponsor: orth Central Texas **Council of Governments**

#### Graduate Student Researcher

#### University of Hawaii at Manoa, Hawaii, USA

Assessment of Transportation Safety Equity for Hawaiians, part-Hawaiians and Pacific Islanders in RITI Communities, PI: Panos D. Prevedouros, Co-PI: Guohui Zhang, Sponsor: **U.S. Department of Transportation** 

### Assistant Professor and Lecturer

### Rajshahi University of Engineering and Technology, Bangladesh

Scope of utilizing recycled materials in construction and renovation of pavements, PI: Md Mintu Miah, Sponsor: Rajshahi University of Engineering and Technology

## **PUBLICATIONS**

- 7 Journal published and 1 journal paper currently under review
- 1 book chapter, 6 conference proceeding and 6 peer-reviewed conference presentation and 1 invited talk

## **Journal Papers**

June 2019-Present

Aug 2017-Dec 2018

Feb 2014-July 2017

# Under Review

- <u>Miah, M.</u>, Hyun K., Mattingly, S., Khan, H., (2022), Estimation of Daily Bicycle Traffic Using Machine and Deep Learning Techniques, *Journal of Transportation,* Springer nature (Revised)
- <u>Miah, M.</u>, Hyun K., Mattingly, S., Khan, H., (2022), A Review of Bike Volume Estimation Studies, Transport Reviews (Submitted)

# Published/In Print

- Miah, M., Hyun, K., Mattingly, S., Joseph, B., Nathan, M., & Sirisha, K. (2021). Challenges and Opportunities of Emerging Data Sources to Estimate Network-wide Bike Counts. Journal of Transportation Engineering, Part A: Systems, 148(3), 1–8. https://doi.org/10.1061/JTEPBS.0000634
- <u>Miah, M.</u>, Naz, F., Hyun, K., Mattingly, S., Cronley, C., Fields, N (2020) Barriers and Opportunities for Paratransit Users to Adopt On-Demand Micro Transit, Journal of Research in Transportation Economics, Elsevier, Vol 84, p. 101001
- Dipu Sutradhar , <u>Mintu Miah</u> , Golam Jilany Chowdhury , Mohd. Abdus Sobhan , Effect of Using Waste Material as Filler in Bituminous Mix Design, American Journal of Civil Engineering. Vol. 3, No. 3, 2015, pp. 88-94. doi: 10.11648/j.ajce.20150303.16
- Mamun, M.M.H., <u>Miah, M.M.</u> and Islam, M.I., 2015. Present condition of road traffic accident: A Case study of Rajshahi City, Bangladesh. International Journal of Computer Applications, vol. 111, issue 7, pp. 36-41
- Tanzim, S.M.Z. and <u>Miah, M.M.</u>, 2016. Study of Parking Accumulation in Major on Street Parking Spots in Rajshahi City, Bangladesh. Journal of Construction and Building Materials Engineering, 2(1), pp.1-15, e-ISSN: 2581-6454.
- <u>Miah, M.M.</u>, Asad, M.A., Serker, N.K. and Ahmed, T., 2013. Numerical Analysis of Coupled Shear Wall for Drift Control, Current Advances in Civil Engineering (CACE), American V-Kin g Scientific Publishing, Volume 1, Issue 1, pp.27-32
- <u>MM Miah</u>, MTI Tanoy, MS Rana., 2016," Performance Evaluation of Household Waste Plastic as Additive in the Bituminous Mix Design" International Journal of Scientific & Engineering Research, Volume 7,PP 1495-1500, Issue 1, January-2016, ISSN 2229-5518

# **Book Chapter**

Nathanail E.G., Prevedouros P.D., <u>Mintu Miah M.</u>, De Melo Barros R. (2019) Predicting the Impact of Text-Reading Using Decision Trees. In: Moura Oliveira P., Novais P., Reis L. (eds) Progress in Artificial Intelligence. EPIA 2019. Lecture Notes in Computer Science, vol 11804. Springer, Cham. https://doi.org/10.1007/978-3-030-30241-2\_57

# **Peer Reviewed Conference Proceedings**

- <u>Miah, M.</u>, Hyun, K., Mattingly, S., Khan, H., (2022) Estimation of Daily Bicycle Traffic Using Machine and Deep Learning Techniques, *Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2022*
- <u>Miah, M.</u>, Naz, F., Hyun, K., Mattingly, S., Cronley, C., Fields, N (2020) Barriers and Opportunities for Paratransit Users to Adopt On-Demand Micro Transit, Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2020
- <u>Md Mintu Miah</u>, Kate (Kyung) Hyun, Stephen P. Mattingly, Joseph Broach, Nathan McNeil, Sirisha Kothuri, (2021), "Challenges and Opportunities of Emerging Data Sources to Estimate Network-wide Bike Counts", International Symposium on Transportation Data and Modelling, June 21~23, 2021 @University of Michigan, Ann Arbor, USA.
- Panos D Prevedouros, Eftihia G Nathanail, <u>Md Mintu Miah</u>, Rafaela De Melo Barros (2020). Analysis of Professional Drivers while Text-Reading, and Prediction of Driving Behavior Using Cluster Modeling, Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2020.
- <u>Md. Mintu Miah</u>, Panos D Prevedouros,(2019). Effects of Reading Text While Driving: Analysis of 200 Honolulu Taxi Drivers on a Simulator, Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2019.
- Das, B.K. and <u>Miah, M.M.,(</u>2017). Present Conditions of Most Hazardous Road Intersections: A Case Study of Rajshahi City, Bangladesh. International Conference on Planning, Architecture and Civil Engineering (ICPACE 2017), Volume-1, Issue-1, Pp-265-270, ISBN: 978-984-34-2154-8

# **Technical Reports**

- Kothuri, S., Broach, J., McNeil N., Hyun, K., Mattingly S., <u>Miah, M., Proulx, F., Nordback,</u> <u>K.,</u> (2022). Exploring Data Fusion Techniques to Estimate Network-Wide Bicycle Volumes, National Institute for Transportation and Communities (NITC).
- Kate Hyun, Stephen Mattingly, Courtney Cronley, Noelle Fields, <u>Md Mintu Miah</u>, Farah Naz, Shamsun Nahar (2019), Characterizing Handitran Users and Their Travel Pattern, City of Arlington, Texas <u>https://drive.google.com/file/d/1wjJ08e9L24LF4Qv1auMR4iTHhSHB08a/view?us</u> p=sharing
- Prevedouros, Panos; <u>Miah, M. Mintu</u>; Nathanail, Eftihia (2020). Effects of Reading Text While Driving: A Driving Simulator Study. Published in Transportation Research information Database, Subject Areas: Highways; Safety and Human Factors; Report/Paper Numbers: INE/CSET 20.05; Files: UTC, TRIS, ATRI, USDOT; Accession Number: 01741882; <u>https://trid.trb.org/view/1708998</u>
- Prevedouros, Panos D; Bhatta, Kishor; <u>Miah, M Mintu</u> (2019). 2007–2016 Fatal Traffic Crashes in Alaska, Hawaii, Idaho, and Washington and Characteristics of Traffic Fatalities Involving Hawaiians and CSET Minorities. Published in Transportation Research information Database, Subject Areas: Highways; Safety and

Human Factors; Society; Report/Paper Numbers: INE/CSET 19.06; Files: UTC, TRIS, ATRI, USDOT; Accession Number: 01705745;

- https://scholarworks.alaska.edu/handle/11122/10041
- <u>Miah, M.M.</u> 2018. Effects of Reading Text While Driving Analysis Of 200 Honolulu Taxi Drivers On A VS500M Simulator, MS Dissertation, University Of Hawai'i at Mānoa, Scholar Space And Proquest. <u>https://scholarspace.manoa.hawaii.edu/handle/10125/62045</u>

## **CONFERENCE PRESENTATION**

- <u>Miah, M.</u>, Hyun, K., Mattingly, S., Khan, H., (2022) Estimation of Daily Bicycle Traffic Using Machine and Deep Learning Techniques, *Transportation Research Board* Washington D.C., January 2022
- <u>Md Mintu Miah</u>, Kate (Kyung) Hyun, Stephen P. Mattingly, Joseph Broach, Nathan McNeil, Sirisha Kothuri, (2021), "Challenges and Opportunities of Emerging Data Sources to Estimate Network-wide Bike Counts", International Symposium on Transportation Data and Modelling, June 21~23, 2021 @University of Michigan, Ann Arbor, USA.
- <u>Miah, M.</u>, Naz, F., **Hyun, K**., Mattingly, S., Cronley, C., Fields, N (2020) Barriers and Opportunities for Paratransit Users to Adopt On-Demand Micro Transit, *Transportation Research Board* Washington D.C., January 2020
- Panos D Prevedouros, Eftihia G Nathanail, <u>Md Mintu Miah</u>, Rafaela De Melo Barros (2020). Analysis of Professional Drivers while Text-Reading, and Prediction of Driving Behavior Using Cluster Modeling, Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2020.
- <u>Md. Mintu Miah</u>, Panos D Prevedouros,(2019). Effects of Reading Text While Driving: Analysis of 200 Honolulu Taxi Drivers on a Simulator, Proceedings of the Annual Meeting of the Transportation Research Board, TRB 2019.
- Das, B.K. and <u>Miah, M.M.</u> (2017). Present Conditions of Most Hazardous Road Intersections: A Case Study of Rajshahi City, Bangladesh. International Conference on Planning, Architecture and Civil Engineering (ICPACE 2017), Volume-1, Issue-1, Pp-265-270, ISBN: 978-984-34-2154-8

# **Invited Talks**

• 'International Workshop on Sustainable Protection and Restoration of Soil and Groundwater Environment' - organized by National Cheng Kung University, Tainan, Taiwan, August 23 to August 31, 2015

## **TEACHING EXPERIENCE**

Graduate Teaching Assistant		
University of Texas at Arlington, Texas, USA		
<ul> <li>CE 3302: Transportation Engineering</li> </ul>	Spring 2019/Summer 2019	
Assistant Professor		
Rajshahi University of Engineering and Technology (RUET), Bangladesh		
CE 4105: Transportation Engineering-II	Spring 2017	
CE 4111: Structural Analysis & Design-III	Spring 2017	
CE 2203: Geology and Geomorphology	Spring 2017	
Lecturer		
Rajshahi University of Engineering and Technology, Bangladesh		
<ul> <li>CE 3205: Transportation Engineering-I</li> </ul>	Spring/ Fall 2015/2016	
<ul> <li>CE 1101: Surveying</li> </ul>	Spring 2014/2015/2016/2017	
<ul> <li>CE 2121: Fluid Mechanics-I</li> </ul>	Fall 2014/2015/2016	
CE 2122: Fluid Mechanics Sessional -1	Fall 2014/2015/2016	
CE 3122: Engineering Hydraulics Sessional	Fall 2016	
<ul> <li>CE 3221: Hydrology</li> </ul>	Fall 2016	
Lecturer		
Stamford University, Bangladesh		
<ul> <li>CE 415: Prestressed Concrete</li> </ul>	Fall 2013/Spring 2014	
CE 411: Structural Analysis and Design II	Fall 2013/Spring 2014	
Lecturer		
World University, Bangladesh		
<ul> <li>CE 351: Transportation Engineering-I</li> </ul>	Summer/Fall 2013	
<ul> <li>CE 451: Transportation Engineering-II</li> </ul>	Summer/Fall 2013	
<ul> <li>CE 431: Environmental Engineering -III</li> </ul>	Summer/Fall 2013	

# Honors

- TexITE Dallas Scholarship-2022
- Prime Minister Gold Medal Award for scoring faculty highest CGPA, UGC, Bangladesh -2012
- University Gold Medal Award for 1<sup>st</sup> position, RUET, Bangladesh-2011
- Dr. Nazrul Islam Gold Medal for excellent performance in academic records, RUET, Bangladesh-2011
- Best Student Award, RUET, Bangladesh-2011
- Best Student Award, RUET, Bangladesh-2010
- University Merit Scholarships, RUET, Bangladesh-2009/2010/2011

#### **MEDIA**

• Student Spotlight: Md Mintu Miah, University of Texas at Arlington, <u>https://nitc.trec.pdx.edu/news/student-spotlight-md-mintu-miah-university-texas-arlington</u>

### **PROFESSIONAL SERVICE AND AFFILIATIONS**

<ul> <li>Reviewer, Transportation Engineering, Elsevier, Science Direct Journal</li> <li>Reviewer, Transportation Research Board (TRB) Conference Proceedings</li> </ul>	2020-Present 2020-Present
	2021 Dresent
Reviewer, Transportation Research Record (TRR), Sage Journals	2021-Present
• Reviewer, ASCE's Journal of Transportation Engineering, Part A: Systems	2021-Present
• Member: American Society of Civil Engineering #000011424635	2017-Present
• Member: Institute of Transportation Engineers (ITE), University of	2019-Present
Texas at Arlington	
• Member: Institute of Transportation Engineers (ITE), TexITE, member ID: 1089923	2021-Present

### **PROGRAMMING AND SOFTWARE SKILL**

- Developed Automatic Python Scripts to collect wide range of data using API
- Experienced with Econometric and statistical methods for transportation data analysis using Python and R
- Experienced with travel demand modeling
- Experienced with big data mining, analysis, visualization, and interpretation
- Traffic Analysis and simulation using VISSIM
- Transportation Network planning using GIS and TransCAD
- Data Base Design using SQL
- Statistical modeling using SPSS
- High quality report, journal and conference writing using Latex and Microsoft office

#### Important link

- Google Scholar: <u>https://scholar.google.com/citations?user=tYNG1aQAAAAJ&hl=en</u>
- Research Gate: <u>https://www.researchgate.net/profile/Mdmintu Miah</u>
- Linkedin: <u>linkedin.com/in/md-mintu-miah-9194a3166</u>
- Personal Website: <u>https://mintu07ruet.github.io/</u>
- Kaggle: <u>https://www.kaggle.com/mintumiah/</u>
- RUET Faculty Page: <u>https://www.ruet.ac.bd/mintu07ruetce</u>