

Curriculum Vitae

Omar Faruque Hamim

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Github Profile: <https://hamim-1204007.github.io/resume/>

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Career Objective:

I am a self-made person and I look forward to seeing myself as an academician contributing especially to the overall infrastructure sector of my country Bangladesh. I always keep confidence in myself, and I believe that any goal is achievable if an extra effort than required is put forth.

Education:

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| ➤ 2021 – Present | Purdue University
PhD in Civil Engineering (3 rd Year)
GPA : 3.93 on a 4.00 scale base (continuing) |
| ➤ 2017 – 2020 | Bangladesh University of Engineering & Technology
M.Sc. in Civil Engineering
CGPA : 3.92 on a 4.00 scale base |
| ➤ 2013 – 2017 | Bangladesh University of Engineering & Technology
B.Sc. in Civil Engineering
CGPA : 3.97 on a 4.00 scale base (Position 2 nd out of 234 students) |

Professional Experience:

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| ➤ Graduate Research Assistant, Lyles School of Civil Engineering, Purdue University | 19 January, 2021 – Present |
| ➤ Assistant Professor, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET) | 21 November, 2020 – Present (On Leave) |
| ➤ Lecturer, Department of Civil Engineering, Bangladesh University of Engineering and Technology (BUET) | December 6, 2017 – 20 November, 2020 |

Research Experience and Publications:

- Hamim, O.F., & Ukkusuri, S.V. (2022). Determining prominent factors across system hierarchies to improve road safety in LMICs: A case study of Bangladesh. *Safety Science*, 105709. DOI: 10.1016/j.ssci.2022.105709
- Hamim, O.F., Hasanat-E-Rabbi, S., Debnath, M., Hoque, M.S., McIlroy, R.C., Plant, K.L., & Stanton, N.A. (2022). Taking a mixed-methods approach to collision investigation: AcciMap, STAMP-CAST and PCM. *Applied Ergonomics*, 100.
- Hamim, O.F., Saddam, M.H., & Hadiuzzaman, M. (2021). Developing empirical model with graphical tool to estimate and predict capacity of rural highway roundabouts. *International Journal of Transportation Science and Technology*.
- Hasanat-E-Rabbi, S., Hamim, O. F., Debnath, M., Hoque, M. S., McIlroy, R. C., Plant, K. L., & Stanton, N. A. (2021). Exploring the Relationships between Demographics, Road Safety Attitudes, and Self-Reported Pedestrian Behaviours in Bangladesh. *Sustainability*, 13(19), 10640. DOI:10.3390/su131910640
- Das, R. C., Shafie, I. K., Hamim, O. F., Hoque, M. S., McIlroy, R. C., Plant, K. L., & Stanton, N. A. (2021). Why do road traffic collision types repeat themselves? Look back before moving forward. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 1–12. <https://doi.org/10.1002/hfm.20932>

- Debnath, M., Hasanat-E-Rabbi, S., Hamim, O.F., Hoque, M.S., McIlroy, R., Plant, K., & Stanton, N. (2021). An investigation of urban pedestrian behaviour in Bangladesh using the Perceptual Cycle Model. *Safety Science*, 138, 105214.
- Hamim, O.F., Debnath, M., Hasanat-E-Rabbi, S., Hoque, M.S., McIlroy, R., Plant, K., & Stanton, N. (2021). Resolving the differences between system development and system operation using STAMP: a road safety case study in a low-income setting. *Ergonomics*, 64, 839 - 855.
- Hamim, O.F., Hoque, M.S., McIlroy, R.C., Plant, K.L., Stanton, N.A., 2020. Representing two road traffic collisions in one Accimap: Highlighting the importance of emergency response and enforcement in a low-income country. *Ergonomics*, 63(12), 1512-1524. DOI: 10.1080/00140139.2020.1807064.
- Hamim, O.F., Aninda, S.S., Hoque, M.S., & Hadiuzzaman, M. (2021). Suitability of pavement type for developing countries from an economic perspective using life cycle cost analysis. *International journal of pavement research and technology*, 1-8.
- Hamim, O.F., Hoque, M.S., McIlroy, R.C., Plant, K.L., and Stanton, N.A. (2020). A sociotechnical approach to accident analysis in a low-income setting: Using Accimaps to guide road safety recommendations in Bangladesh, *Safety Science*, 124, 104589. <https://doi.org/10.1016/j.ssci.2019.104589>
- Hamim, O.F., Hoque, M.S. (2019). ‘Application of Accimap Methodology to Investigate the Bus Accident at Salehpur Bridge’, *JSCE 21st International Summer Symposium, Kagawa, Japan, 3-4 September, 2019*.
- Hamim, O.F., Hoque, M.S. (2019). ‘Prediction of Pavement Life of Flexible Pavements under the Traffic Loading Conditions of Bangladesh’, *International Airfield and Highway Pavements Conference, Chicago, Illinois, USA, 21-24 July, 2019*.
- Hamim, O.F., Hoque, M.S., McIlroy, R.C., Plant, K.L., and Stanton, N.A. (2019). ‘Applying the Accimap Methodology to Investigate the Tragic Mirsharai Road Accident in Bangladesh’, *2018 International Conference on Civil, Architectural and Environmental Engineering*, Wellington, New Zealand, 10-12 December, 2018.
- Co-Investigator in the Bangladesh STARS team under the project titled “**Socio-Technical Approach to Road Safety**” funded by NIHR (National Institute for Health Research), UK and lead by Chief Investigator Professor Dr. Neville A. Stanton from August 2017 to December, 2020.
- MSc thesis on the topic “**Road Accident Analysis in Bangladesh using System Based Socio-Technical Approach**”
- Undergraduate thesis on the topic “**Comparative Study of Rigid & Flexible Pavements Construction in Bangladesh**”

Honours, Awards & Study Grants:

- **University Grants Commission (UGC) Scholarship** for securing first position in Civil Engineering Faculty till Level-3/Term-II
- **University Merit Scholarship** in Level-1/Term-I, Level-1/Term-II, Level-2/Term-I, Level-2/ Term-II, Level-3/Term-I, Level-3/Term-II, Level-4/Term-I, Level-4/Term-II
- Enlisted in the **Dean's List** in Level-1, Level-2, Level-3 and Level-4
- Recipient of **Study Tour Grant (STG) 2019 by JSCE** to represent Bangladesh in a week-long study tour program held in Japan.

Technical Skills:

- Programming Language Skills: **C++, Python, Java**
- Experienced in machine learning, deep learning, and computer vision algorithms
- Experienced in data analysis and visualization using **Pandas, Geopandas, Matplotlib, ggplot**
- Computer Aided Design & Drafting Software: **AutoCAD**
- Simulation Software: **METS-R Simulation for EVs, SUMO, SCANeR™ studio by AV Simulation, MATLAB, VISSIM, ETABS, SAP**
- Proficiency in Microsoft Word, Microsoft Excel, Microsoft PowerPoint, MS-DOS

Linguistic Proficiency:

- English (Fluent Working Proficiency)
- Bangla (Native language)

Extra-Curricular Activities & Awards:

- **2nd Runner-up** in “CECON” the Flagship Competition of **1st Bangladesh Civil Engineering SUMMIT – 2016**
- Poster Presentation on **A Transportation System Working with Human Brain** in 1st Bangladesh Civil Engineering SUMMIT – 2016
- Member of the Editorial Body of the undergraduate conference **1st Bangladesh Civil Engineering SUMMIT – 2016** arranged by CESA, BUET
- Participated in “Fashion Show” of Civil Fest, BUET - 2016
- **Winner** of FIFA 11 in Gigabyte Gaming Contest – 2013, FIFA 10 & FIFA 09
- **Champion** of Call of Duty 4: Modern Warfare in World Cyber Games 2012 as a member of team 'void'
- Participated in "**Spelling Bee Competition**" arranged by Dhaka Residential Model College, Dhaka in the year 2009

References:

Dr. Satish Ukkusuri
Professor (PhD Supervisor)
Lyles School of Civil Engineering, Purdue University
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Dr. Md. Shamsul Hoque
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