

SALAH UDDIN MOMTAZ

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CAREER SUMMARY

- Graduate Research Assistant at the University of Central Florida, till date.
- Have more than 6 years of work experiences in home and abroad.
- Have experience in transportation planning, and traffic safety related projects in home and abroad.
- Skilled in: Driving Simulator, C++/C#, SAS, JMP, R, SPSS, GAUSS, VISSIM, Limdep/NLogit, GIS, Java-Script, Visual Basic, LaTeX.
- Author of 2 papers (TRB, JTE-ASCE), 1 report for State DOT, & 2 poster presentations. Several papers are under review or in preparation.

RESEARCH INTEREST

- Econometrics
- Human Factor, Drivers' Behavior, Diving Simulation, etc.
- Traffic Safety
- Fuzzy Logic

EDUCATIONAL BACKGROUND

- Doctor of Philosophy in Civil Engineering [On going]
University of Central Florida, Orlando, FL, US
- Master of Science in Civil Engineering
University of South Alabama, Mobile, AL, US
- Bachelor of Science in Civil Engineering
Bangladesh University of Engineering and Technology, Dhaka, Bangladesh

RESEARCHES AND PUBLICATIONS

1. Aziz, H.M.A., **Momtaz, S.**, (2014). A Random-Parameter (Mixed Logit) Model to Explain Why More Households in Dhaka City are Deciding to Purchase Cars in Recent Years. Presented at the *Transportation Research Board 93rd Annual Meeting*, Washington, DC.
2. Kang, M.-W., **Momtaz, S.**, Barnett, T.E., (2015). Crash Analysis and Public Survey for Drowsy Driving Advisory Zone. *J. of Trans. Eng. (ASCE)*
3. **Momtaz, S.**, Kang, M.-W., (N.D.). Effects of Auditory Pavement Treatment on Driver Compliance to Roadside Safety Signs A Driving Simulator Study. Under Review for publication in the *J. of Trans. Eng. (ASCE)*.

4. **Momtaz, S.**, Kang, M.-W., Eluru, N., (2016). Modeling Driver Behavior: Towards Effective Usage of Roadside Rest Areas to Prevent Fatigued and Drowsy Driving. Abstract accepted for the *International Conference on Sustainable Design, Engineering and Construction*, Arizona.

REPORT PUBLICATION

1. Kang, M.-W., **Momtaz, S.**, (2015). A Safety Study of Alabama Highways Reducing Crashes Caused by Drowsy Driving: Focusing on Drowsy Driving Warning Signs & Roadside Rest Area Signs. Final Report, Prepared for *Alabama Department of Transportation, University of South Alabama*, Mobile, AL.

THESIS PUBLICATIONS

- **MSCE**, University of South Alabama
"Effectiveness of Auditory Pavement Treatments on Drivers Compliance to Roadside Safety Signs - a Driving Simulator Study."
Advisor: Dr. Min-Wook Kang
- **BSc**, Bangladesh University of Engineering and Technology
"Demand Modeling for Planned Commuter Rail in Greater Dhaka City" Supervisor: Dr. Moazzem Hossain

POSTER PRESENTATIONS

- Kang, M.W., **Momtaz, S.**, Caldwell, T., Ellzey, J., (2015). Crash Analysis and Public Survey for Drowsy Driving Advisory Zone. Presented at the *USA Faculty Development Council's 22nd Annual Spring Research Forum*, Mobile, AL.
- **Momtaz, S.**, Kang, M.W., Caldwell, T., Ellzey, J., (2015). Effectiveness of Audible Pavement Treatments on Drivers Compliance to Roadside Safety Signs - A Driving Simulator Study. Presented at the *USA Faculty Development Council's 22nd Annual Spring Research Forum*, Mobile, AL.

RELATED WORK EXPERIENCES

- GRADUATE RESEARCH ASSISTANT Jan 2016 – Present
Department of Civil, Environmental, & Construction Engineering, University of Central Florida, Orlando, FL, US.
- GRADUATE TEACHING ASSISTANT Aug 2015 – Dec 2015
Department of Civil, Environmental, & Construction Engineering, University of Central Florida, Orlando, FL, US.
 - Performing as a Teaching Assist for the following two transportation engineering courses:
 - TTE 4274: Transportation System Engineering
 - TTE 3810: Highway Engineering
- GRADUATE RESEARCH ASSISTANT Jan 2014 - Jul 2015
Department of Civil Engineering, University of South Alabama, Mobile, AL, US. - ALDoT funded research project on Traffic safety of drowsy drivers using Driving Simulator.
 - Statistical analysis of crash data using SPSS & R.
 - Developed and designed onsite & online public survey questionnaire.
 - Developed USA-Simulation Sickness Protocol to screen out the simulation sickness prone sample driver during a driving simulation test using Visual Basic

- Assessing various audio-visual warning and advisory system on roadway to reduce the risk of drowsy driving.
- Designed and developed various simulation scenario, specially of interstate highway to collect drivers behavior using driving simulator
- RESEARCH ASSISTANT Jun 2009 - Dec 2009
Bangladesh University of Engineering & Technology
 - Developed conceptual layout of the flyover for future detail design and feasibility survey, using AutoCAD.
 - Preliminary statistical analysis of traffic volume and speed data.
 - Field survey and image processing for the feasibility analysis of a proposed flyover. - Assist supervisor in writing project report.
- SURVEYOR & DATA ANALYST [Part-time] Jan 2009 - Jun 2009
Bureau of Research and Testing Center, BUET.
 - Survey for cracks on runway.
 - Report the investigated cracks on runway for future treatment design.
 - Coordinate the survey team as the survey team leader.
 - Collected primary data for AADT (traffic volume) calculation via counting vehicles. - Analysis for the delay time calculation.
 - Calculated bypass traffic on other roads during construction based on existing traffic.
 - Recalculated signal time and developed alternatives for bypass overflow traffic.

RELATED PROJECTS

- A Safety Study of Alabama Highways Reducing Crashes Caused by Drowsy Driving: Focusing on Drowsy Driving Warning Signs & Roadside Rest Area Signs [On Going] **Role: Graduate Research Assistant**
- Efficiency of Flyovers at Dhaka (Bangladesh): Causes of Bottle-Neck Congestion at Exit Ramp Using Microscopic Simulation [On Going] **Role: Mentor for 2 Fresh Graduates**
- Free Feasibility Survey and Conceptual Design for Jatrabari Fly Over, Dhaka, Bangladesh. **Role: Research Assistant**
- Asphalt Concrete Runway Overlay Project of Shahjalal International Airport, Dhaka, Bangladesh. **Role: Surveyor & Data Analyst**
- Feasibility Study of Underpass Construction Project at Shahabag, Banglamotor, Sonargaon Intersection, Dhaka, Bangladesh **Role: Survey Team Coordinator & Data Analyst**

OTHER WORK EXPERIENCES

- CIVIL ENGINEER Jun 2013 - Dec 2013
Medway Consultancy (UK) Limited, Dhaka Office, Dhaka, Bangladesh.
- SENIOR COORDINATOR (STRUCTURAL DESIGN) Apr 2013 - May 2013
Professional Associates Limited, Dhaka, Bangladesh.
- COORDINATOR (DESIGN) Apr 2010 - Sep 2011
Structural Steel (BD) Limited, Dhaka, Bangladesh.
- DESIGN ENGINEER Jun 2009 - Apr 2009
SteelMark Building Systems Limited, Dhaka, Bangladesh.

CERTIFICATION COURSE

- Training course on GIS using Arc Info, AutoCAD Map, Arc View
Engineering Staff College, Bangladesh, Dhaka, Bangladesh.

2008

COMPUTER SKILLS

- Driving Simulator: Experienced in working with Driving Simulator (RTI).
- Professional Packages: VISSIM, SAS, GAUSS, JMP, C/C++/C#, Visual Basic, Java Script, SPSS, R, Limdep/NLogit, ArcGIS, AutoCAD Map, MS Project, AutoCad, LaTeX, etc.

PROFESSIONAL AFFILIATIONS

- Student Member: American Society of Civil Engineers (ASCE), Institute of Transportation Engineers (ITE), Gulf Region Intelligent Transportation Society (GRITS)
- Member: Institute of Engineers, Bangladesh (IEB)

EXTRA-CURRICULAR ACTIVITIES

- Former President, BUET Chess Club.
- Former Chief Coordinator, Students', Civil Engineering Students' Association, BUET.
- Exhibition Event organizer, International roadway safety conference 2006 at BUET, Bangladesh.