1. General Information

Nael Alsaleh

PhD Candidate in Transportation Engineering,
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2. Education

Ryerson University, Canada
Doctor of Philosophy in Civil Engineering/ Transportation, Laboratory of Innovations in Transportation (LiTrans), September 2019 – Till now.

CGPA (Course Load Completed): 4.33/4.33
Research Progress: Graded *"Exceptional Performance"* in all my research progress reports.
Candidacy Examination: Passed both the written and oral exams on April 26, 2021
Supervisor: Dr. Bilal Farooq

Jordan University of Science and Technology, Jordan.
Master of Science in Civil Engineering/ Transportation, February 2016 – October 2017. Full scholarship award from Scientific Research Support Fund / Ministry of Higher Education

Thesis Title: "Turbo Roundabout Usage In Lieu of Conventional Roundabouts for the Jordanian Traffic Conditions". **Awarded as the best Master thesis at Jordan University of Science and Technology for the year of 2018.**
CGPA: 4.17/4.00- Distinguished
Supervisor: Dr. Mohammad Khasawneh

Jordan University of Science and Technology, Jordan.
Bachelor of Engineering, Civil Engineering, September 2011 – August 2015.
CGPA: 85.2%- Excellent

3. Leadership Skills

3A. President of Ryerson Institute of Transportation Engineers, 2021-2022 Academic Year

Responsibilities include but not limited to the following:

- Communicating with the Faculty Advisor
- Chair business and general meetings
- Ensures active internal and external communications
- Plans and organizes membership drives
- Supervises Chapter activities and committees
- Names any committees and appoints chairs.

3B. Moderator, Innovative Sessions, ITS Canada 2021 Virtual Conference, June 21-22, 2021

Moderating three individual presentations. Main Responsibilities:

- Keep the discussion flowing
- Invite people to ask questions of the presenter
- Prepare few questions to fill any gaps.
- Welcome new people into the conversation with a quick recap of the discussion.

3C. Student Supervision

- Co-supervise Maryam Elbeshbishy, undergraduate student, with Dr. Bilal Farooq, Ryerson University, May 2021 – Till now.
- Co-supervise Farah Al Tarifi, M.Sc. student, with Dr. Nawal Louzi, Al-Ahliyya Amman University, January 2021 – Till now

3D. Review Activities

- Transportation Research Board (TRB) 101st Annual Meeting, 2022. (One Manuscript Reviewed)

3E. Speaker at University of Cambridge, Martin Centre for Architectural and Urban Studies, *January 2021.*

Presenting "*Spatio-Temporal Demand Modelling for On-Demand Transit Services"* work *In Applied Urban Modelling Workshop (AUM2020).*

4. Honors and Awards

- **The First Place Award in The Best Master Thesis at JUST for 2018**, from the Faculty of Graduate Studies at Jordan University of Science and Technology.
- **Full scholarship award from Scientific Research Support Fund / Ministry of Higher Education** from February 2016 to October 2017.
- Honored by The Faculty of Engineering in Jordan University of Science and Technology Due to The High Academic Achievement during 2014/2015 academic year.
- Honored by The Faculty of Engineering in Jordan University of Science and Technology Due to The High Academic Achievement during 2011/2012 academic year.

5. Certifications

- **Institute for Engineering Teaching**, Canadian Engineering Education Association, June 2021.
- Machine Learning with Python, Cognitive Class, Online, October 2019.
- Data Analysis with Python, Cognitive Class, Online, October 2019.
- Python 101 For Data Science, Cognitive Class, Online, June 2019.

6. Publications

1) Alsaleh, N., Farooq, B., Zhang, Y., & Farber, S. (2021). On-Demand Transit User Preference Analysis using Hybrid Choice Models. *Sustainable Cities and Society.* (Under 1st Review).
2) Sanaullah, I. (equal contribution), Alsaleh, N. (equal contribution), Djavadian, S., & Farooq, B. (2021). Spatio-temporal analysis of on-demand transit: A case study of Belleville, Canada. *Transportation Research Part A: Policy and Practice*, *145*, 284-301. Url: https://arxiv.org/pdf/2012.02600.pdf.
3) Ansar, S. M., Alsaleh, N., & Farooq, B. (2021). Analysis of Driver Behaviour Towards CAV Control Transition in Mixed Traffic Environment. *Submitted to Transportation Research Board (TRB) 101st Annual Meeting for Presentation,*
4) Alsaleh, N., & Farooq, B. (2021). Interpretable Data-Driven Demand Modelling for On-Demand Transit Services. *Submitted to Transportation Research Board (TRB) 101st Annual Meeting for Presentation.*
5) Khasawneh, M. A., Aljarrah, M., & Alsaleh, N. (March 2021). Artificial Neural Network (ANN) Approach to Predict LWST Values from Friction and Texture Measurements. In *Proceedings of 11th International Conference on Key Engineering Materials.*
6) Alsaleh. N., & Farooq. B. (2021). Spatio-Temporal Demand Modelling for On-Demand Transit Services. Presented at Applied Urban Modelling Workshop (AUM2020), Martin Centre for Architectural and Urban Studies, University of Cambridge.
7) Alsaleh, N., & Farooq, B. (2020). Machine Learning Based Demand Modelling for On-Demand Transit Services. *Transportation Research Part A: Policy and Practice.* (Under 3rd Review).
8) Khasawneh, M. A., & Alsaleh, N. M. (2018). Turbo Roundabout Usage in Lieu of Conventional Roundabouts for the Jordanian Traffic Conditions. *International Journal of Civil Engineering*, *16*(12), 1725-1738.
9) Alsaleh, N. M., & Shbeeb, L. (2018). Turbo, flower and conventional roundabouts in Jordan. In *Proceedings of 6th Annual international Conference on Architecture and Civil Engineering (ACE 2018), May* (pp. 14-15).
10) Shbeeb, L. I., & Alsaleh, N. M. (2018). Evaluation of School Zone Improvement Schemes. In *Proceedings of 6th Annual International Conference on Architecture and Civil Engineering (ACE 2018), May* (pp. 14-15).

7. Teaching Experience

Graduate Assistant, Ryerson University, Winter 2020 & Winter 2021.

Main Responsibilities:

- Preparing written materials for Transportation Engineering tutorial classes.
- Demonstrating and explaining Transportation Engineering course material.
- Helping students perform and solve Transportation Engineering course assignments.
- Grading students' assignments.

Full-Time Lecturer of Civil Engineering, Al-Ahliyya Amman University, October 2017 – September 2019.

Developed and taught the following civil engineering courses:

- Transportation Engineering.
- Engineering Statistics.
- Geotechnical Engineering.
- Geotechnical Engineering Laboratory.
- Computer Applications in Civil Engineering.
- Civil Engineering Drawing.
- Numerical Analysis.
- Graduation Project 1 & 2.

Part-Time Lecturer of Civil Engineering, Al Hussein Technical University (HTU), February 2019 – July 2019.

Part-time lecturer at HTU School of Construction Technology and Built Environment that follows Pearson BTEC (Business and Technology Education Council) qualifications and standards, where my responsibilities include:

- Developing and Teaching Geotechnics & Soil Mechanics course.
- Developing the assignment brief for Geotechnics & Soil Mechanics course.
- Making both formative and summative assessments for students for Geotechnics & Soil Mechanics course.

8. Practical Experience

Traffic Simulator Consultant, Dar Al Omran Company, Jordan, April 2018 – January 2019

Part-time traffic simulator consultant at Irbid City Center Upgrading Project. Where, my responsibilities include:

- Evaluate, analyze, and simulate pre-upgrade network traffic conditions in terms of safety, level of service and average delay.
- Evaluate, analyze, and simulate the expected network traffic conditions in terms of safety, level of service and average delay after 10 years.
- Provide different traffic scenarios and describe how they can enhance the traffic situation of Irbid city road network, which include: Tunnels, ring roads, new traffic circulations, Turbo roundabouts usage, etc.
- Evaluate, analyze, and simulate post-upgrade network traffic conditions in terms of safety, level of service and average delay.
- Preparing a fully detailed traffic report.

Trainee at Consolidated Contractor Company (CCC), Qatar, June 2015 – August 2015

Full professional engineering training as a pre-requirement to achieve the B.Sc. degree in civil engineering.

9. Presentations and Conferences

- ***Conferences***

  - Presenting, Applied Urban Modelling Workshop (AUM2020), Martin Centre for Architectural and Urban Studies, University of Cambridge, January 28, 2021.
  - Presenting and Publishing, 6th Annual International Conference on Architecture and Civil Engineering, Singapore, May 14-15, 2018.
  - Poster Presentation, 8th International Conference on Engineering, Project and Product Management, Amman, Jordan, September 19-21, 2017.

- ***Presentations***

  - Alsaleh, N., & Farooq, B. (2021, August). Impacts of COVID-19 Pandemic on Ride-hailing Services, *Town of Innisfil.*
  - Alsaleh, N., & Farooq, B. (2021, July). Spatio-temporal Analysis of Innisfil Transit Service, *Town of Innisfil.*
  - Alsaleh, N., Farooq, B., & Elbeshbishy, M. (2021, June). On-Demand Crowdsourced Mobility Service in The Town of Innisfil, *Town of Innisfil.*
  - Alsaleh, N., & Farooq, B. (2021, February). On-Demand Transit User Preference Analysis using Hybrid Choice Models. *In Laboratory of Innovations in Transportation (LiTrans),* Civil Engineering Department, Ryerson University.
  - Alsaleh, N., & Farooq, B. (2021, January). *Spatio-Temporal Demand Modelling for On-Demand Transit Services. In Applied Urban Modelling Workshop (AUM2020),* Martin Centre for Architectural and Urban Studies, University of Cambridge.
  - Alsaleh, N., & Farooq, B. (2021, January). Machine Learning Based Demand Modelling for On-Demand Transit Services. *In seminar presentation,* Civil Engineering Department, Ryerson University.
  - Alsaleh, N., & Farooq, B. (2020, October). On-Demand Transit User Preference Analysis using Hybrid Choice Models. *In Laboratory of innovations in transportation (LiTrans),* Civil Engineering Department, Ryerson University.
  - Alsaleh, N., & Farooq, B. (2019, December). Machine Learning Based Demand Modelling for On-Demand Transit Services. *In Laboratory of Innovations in Transportation (LiTrans),* Civil Engineering Department, Ryerson University.

10. Workshops

- Alsaleh, N., & Farooq, B. (2021, January). *Spatio-Temporal Demand Modelling for On-Demand Transit Services. In Applied Urban Modelling Workshop (AUM2020),* Martin Centre for Architectural and Urban Studies, University of Cambridge.
- Attending a one-day workshop titled "Autonomous Vehicle Innovation Network Partnering Forum." by Ontario Centres of Excellence and Autonomous Vehicle Innovation Network (AVIN), held in Marriott Downtown at CF Toronto Eaton Centre, Toronto, ON, Canada, October 31, 2019.
- Presenting a lecture and organizing a one-day workshop titled "Assessment of Some International Practices to Improve Road Safety", held in Al-Ahliyya Amman University, Amman, Jordan, December 12, 2018.

11. Computer Skills

- Modelling, Data Analysis, and Coding
  - Python
  - MATLAB

➢ Traffic Simulation Tools	- Simulation of Urban MObility (SUMO) - MATLAB - PTV Solutions (VISSIM, VISUM, VISTRO)
➢ Road and Intersection Design Tools	- AutoCAD and AutoCAD Civil 3D. - Transoft Solutions for intersections and parking management, including TORUS Roundabout, AutoTURN, Nexus Intersection, and ParkCAD.
➢ Point Pattern Analysis	- GIS

12. Professional Affiliation

- Member of the Institute of Transportation Engineers (ITE) since May 2021.
- Member of the Ryerson Institute of Transportation Engineers (RITE) since May 2021.
- Member of Jordan Association of Engineers (JAE) since September 2015.
- Member of Jordanian Roads Society (JRS) since February 19, 2019.

13. References

1. Bilal Farooq, Ph.D., Associate Professor, Ryerson University.
Email: bilal.farooq@ryerson.ca

2. Janneke van der Zee, Managing Director, ITS Canada.
Email: janneke@itscanada.ca

3. Mohammad Khasawneh, Ph.D., P.E., Associate Professor, Jordan University of Science and Technology.
Email: mkhasawneh@just.edu.jo

4. Nawal Al Louzi, Ph.D., Assistant Professor, Al-Ahliyya Amman University.
Email: n.louzi@ammanu.edu.jo

5. Lina Izzat Shbeeb, Ph.D., Associate Professor, Al Hussein Technical University (HTU).
Email: Lina.shbeeb@htu.edu.jo

6. Sami Hamamdeh, B.Sc., Head of Section /Transportation and Traffic, Dar Al-Omran Company.
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7. Bassam Almahasneh, Ph.D., Professor, Al-Ahliyya Amman University.
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