

ITE McMaster Student Chapter ANNUAL REPORT 2020-2021



Presidential Address

The chapter has had a fantastic year despite the ongoing pandemic. The executive team decided early in the 2020 year to make the absolute most out of “Going Virtual”, as McMaster University, along with the extended community, transitioned daily operations to a virtual environment to curb the spread of COVID-19. This year, the chapter doubled the number of events hosted, grew our email list, and expanded our executive team to facilitate smooth delivery of all our activities. We are very proud of the chapter’s growth and honored to have been given the opportunity to lead this year’s development.

The focus of our chapter has always been to foster a community spirit within students interested in transportation and host events which underline the importance of transportation; this year has been no exception. Some of the most successful events discussed; rail and transit, transportation planning, transportation safety, career development, leadership and how to make a positive impact on society. We are ending this academic year more energized than ever to continue this rate of growth into the future.

I would like to especially thank Academic Advisor, Dr. Moataz Mohamed, for all his advice and encouragement throughout the year. He went above-and-beyond his commitments, inviting guests to events and raising awareness about the chapter’s initiatives every step of the way.

Finally, I would like to thank the previous executive teams; our student chapter is still young and each year they have contributed to building the community of aspiring transportation professionals in Hamilton and representing McMaster University and ITE nationwide.

Executive Members



Anastasia Soukhov, Co-President

Anastasia is a M.A.Sc. student and recently graduated from the Civil Engineering & Society program (min. GIS) at McMaster University. She's researching sustainable transportation from a life-cycle perspective and is always interested in discussing her research!

She has participated in numerous extracurricular activities, namely, as a founding member of the ITE McMaster Student Chapter and researcher with MacChangers. She has had the opportunity to present at the CTRF Conference, work summer co-ops on GIS and municipal asset management projects at the City of Burlington, and spend a year-long work term as a junior traffic and safety engineer at CIMA+



Moe Mirza, Co-President

Moe is a 4th year Civil Engineering & Management student. He recently completed an 8-month Co-op as a transportation planning engineering assistant at the City of Ottawa. Further, he was an NSERC USRA recipient working with Dr. Moataz Mohamed's research group over the 2020 summer semester.



Petra Ialeggio, Vice President of Administration

Petra is a 3rd year Civil Engineering student. Her interest in the transportation field sparked from working on several transportation related projects during her recent co-op term with the Risk Management group at Hatch.

Petra plans to pursue a transportation-related Masters degree after she completes her Undergraduate education. Within the field, she finds the areas of sustainable urban transport, multi-modal transportation systems and the role transportation will have in smart cities of the future to be very interesting!



Methusha Jeyalingam, Vice President of Media & Communications

Methusha is a 4th year Mechanical Engineering student who has completed a 12-month internship with Metrolinx's Signals & Communications department.

For her final year capstone project, her and her teammates are working on an autonomous solution for crack detection on railway tracks via NDT techniques.



Javaria Asif, Vice President of Finance

Javaria is a 4th year Civil Engineering and Management Student. She recently finished a 12 month internship with the Ministry of Transportation as a Student Engineering Associate and a 4 month Co-Op with R.V. Anderson Associate.

She found her passion in the field of Transportation by working on an Urban Development Project focusing on using underutilized Parking areas in Downtown Hamilton.

Year Representatives



Josh Arbess, Mechanical Engineering Representative

Josh is in his 4th year of the Mechanical Engineering & Society program. A lifelong fan of all things transportation, logistics and infrastructure, he is interested in how the transportation industry touches different aspects of society, culture, and the economy.

Josh recently completed the Rob MacIsaac Fellowship at Metrolinx, where he spent time researching Mobility-as-a-Service, microtransit and customer experience design initiatives.



Minhao Mao, Civil Engineering Representative

Minhao is a 4th year Civil Engineering & Management student.

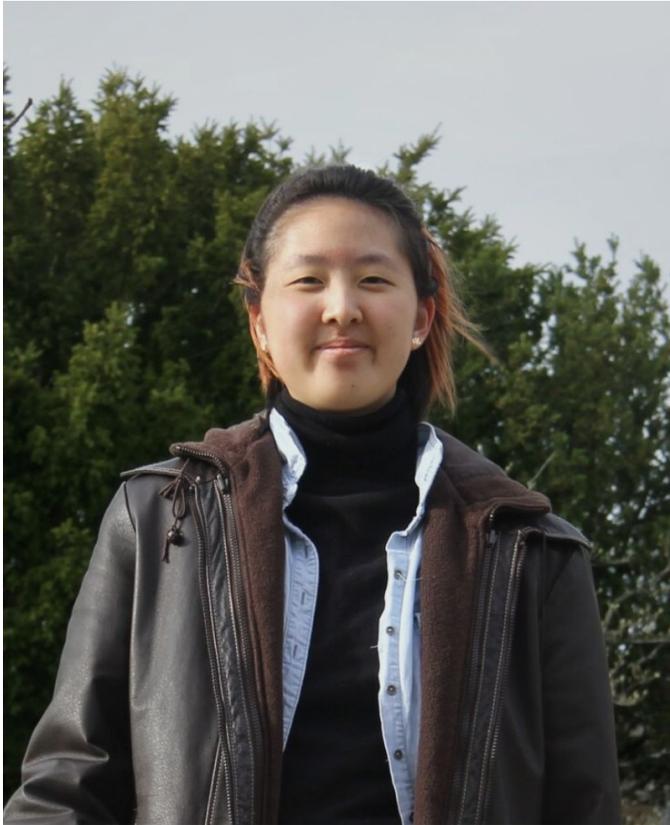
He recently finished a 10-month Co-op as a Maintenance Engineering Analyst at Bombardier Aerospace and De Havilland Aircraft of Canada.



Haniyeh Ghomi, Graduate Representative

Haniyeh is a Civil Engineering and Transportation student at McMaster University and begun her PhD journey focusing on Transportation Safety under the supervision of Dr. Mohamed Hussein.

She enjoys learning advanced techniques to save people's lives, especially vulnerable road users.



Helena Lee, Engineering 1
Representative

Helena is a 1st year in Engineering 1. Her interest revolves around the differences in societal and economic stance on transportation technology internationally.

She is unsure of what the future holds, but optimistic in expanding the public's understanding of the transportation field.

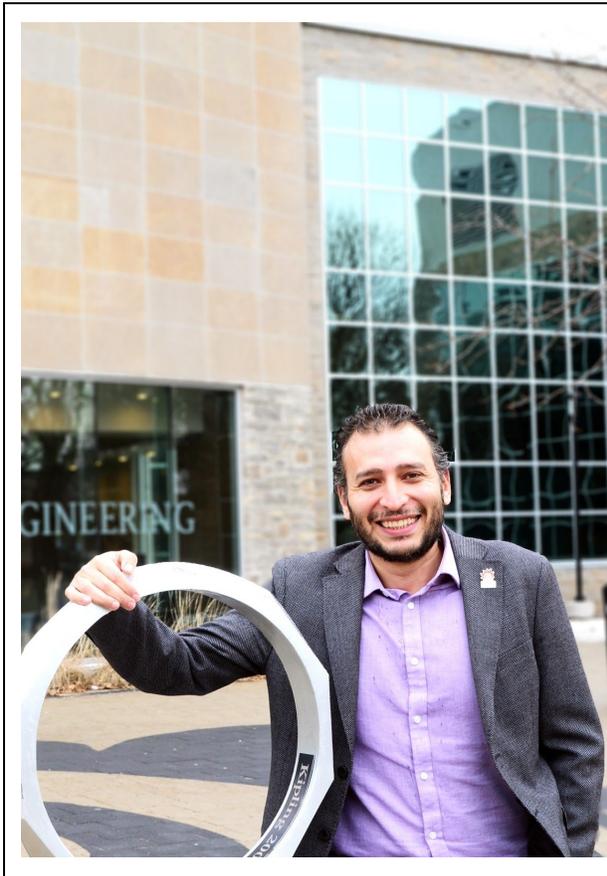


Joseph D'Angelo, Engineering 1
Representative

Joseph is a 1st year Engineering student. He has always had a passion for transportation infrastructure, urban planning, and how the physical spaces around us impact our day-to-experiences and decisions.

Joseph plans to pursue a Civil Engineering and Society degree after first year.

Faculty Advisor



Dr. Moataz Mohamed, Faculty Advisor

Dr. Moataz is an Assistant Professor of Civil Engineering at McMaster University and has been Faculty Advisor since 2017.

His research focuses on the systemic evaluation of transportation networks to achieve sustainable and resilient transportation systems. He is a strong believer of zero-emission, sustainable, resilient transit systems that support the rise of smart communities.

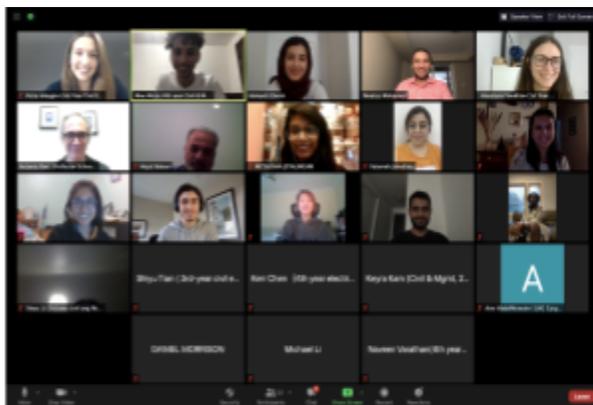
Events Summary

The chapter's events this year covered a wide range of transportation topics through three main series; *Transportation Talk*, *Transportation Research Seminars*, and *Software Crash Courses*.

Our *Transportation Talk* series featured Industry guest speakers from a variety of transportation careers. One event focused on the *Rail and Transit sectors*; we hosted Matthew Lee, a Senior Transportation Planner with Metrolinx and Parinaz Bazeghi, a Digital Project Manager working for the International Union of Railways (UIC) in France. They spoke passionately about the transit planning and railway systems in Ontario and European contexts and both shed light on the joys and challenges of their career journeys. In two other *Traffic and Data* events, we featured Sajad Shiravi, Product Manager at Miovision, and Dr. Wade Genders, a recent Ph.D Graduate from McMaster University currently working as a Machine Learning Engineer at Flow Labs. At both events, the guests spoke to different perspectives on how using computer vision, artificial intelligence and advanced modelling can help cities modernize their approach to traffic management.



Transportation Talk: Rail and Transit Event (Sept. 17.2020)



Screenshot from our second *Transportation Research Seminar Series* (Oct.29.2020)

The Chapter has also had tremendous success hosting the *Transportation Research Seminar Series* where researchers from McMaster University from both the Engineering and Geography departments were jointly featured for interdisciplinary presentations and discussion on their perspective of transportation research. For each event, we featured one researcher from the Faculty of Engineering (Dr. Moataz Mohamed, Dr. Wade Genders (supervised by Dr. Saiedeh Razavi), and Dr. Hao Yang) and one researcher from the school of Geography (Dr. Antonio Paez, Shaila Jamal (supervised by Dr. Bruce Newbold), and Dr. Darren Scott).

The *Software Crash Course* series was also perennially popular, and the virtual format this year was no exception as attendance doubled compared to previous years. The Chapter hosted a crash course on Synchro Software in the Fall Semester and invited students to attend VISSIM Tutorial in the winter semester.

Recruitment and Collaboration

Student Outreach, Always!

In addition to our three series, the Student Chapter also participated in multiple recruitment events. During one event, *Civil Engineering Society Information Night*, we traded stories about perspectives on graduate studies, industry internships, and adjusting to the virtual university experience with students interested in learning more about the transportation career pathways. We were able to engage with a wider audience, recruit first year engineering students to our planning committee, for the first time in the chapter's history, and provide mentorship to the Civil Engineering community.

Additional efforts to collaborate with other student chapters and organizations was achieved this year. For instance, the chapter participated in designing a technical challenge for *Deltahacks*, the annual 3-day hackathon held by McMaster University, on the topic of travel demand and emerging passenger transportation. The chapter also made strides to organize a mentorship program specific to professionals within the GTHA with the Hamilton Section; plans to launch the program are in the works for next year. The chapter also participated in the first-ever virtual 2020 *CITE Traffic bowl* and placed second place. Lastly, efforts to share organizational, event advice, and co-advertise events with other student groups were consistently made throughout the year; namely with the McMaster Society of Research Engineering, McMaster Engineering Society, Civil Engineering Society, McMaster Student Union, and all the department administrators who widely shared our events with their email lists.

Student Chapter Finances

Total Expenses

Item	Details	Price
2020-2021 Expenses		
Domain Name	Annual web hosting fees	\$30.00
Website		\$72.00

Remaining Balance

\$1327.01

Student Chapter Membership

The chapter adjusted to the pandemic by expanding and strengthening its online presence. We established a dedicated chapter [website](#) and streamlined our marketing templates and social media (Facebook, Instagram, LinkedIn, and email) procedures to reach a broader audience. Through these marketing efforts and our virtual platform, attendees from outside of McMaster's Engineering department were invited to tune in; namely students from Mohawk College, McMaster's Geography department, graduate students from Ontario universities, and new engineering alumni who were interested in a transportation career pathway.