JEAN-SÉBASTIEN MATTE

jean-sebastien.matte@mail.mcgill.ca \(\phi\) jsmatte.github.io

Desautels Faculty of Management

1001 Sherbrooke St W, Montreal, Quebec H3A 1G5

EDUCATION

McGill University, Montréal, Qc, Canada

Sept. 2019 - present

PhD Student

Research Interests: Sustainable Operations, Behavioural Economics, Choice Models, Assortment Optimization & Left-Over Inventory, Data-Driven Optimization, Big Data

Methods: Empirical Research, Econometrics, Hierarchical Bayes, Mathematical Optimization, Choice-Based Conjoint (CBC)

Supervised by: Dr. Mehmet Gumus

Université Laval, Québec, Qc, Canada

Sept. 2012 - May 2014

M.Sc. in Civil Engineering

Thesis: Behaviour of Buildings with Asymmetric Setbacks under Seismic Loading

Supervised by: Dr. Charles-Darwin Annan

Université Laval, Québec, Qc, Canada

Sept. 2008 - May 2012

B.Eng. in Civil Engineering

ACADEMIC VISITS

Rotterdam School of Management-Erasmus University

Sept. 2022 – Apr. 2023

Visiting PhD Student

Rotterdam, Netherlands

Host & Collaborator: Prof. Robert Rooderkerk

RESEARCH & ACADEMIC EXPERIENCE

Centre de Recherche sur les Infrastructures en Béton (CRIB)

Sept. 2014 – Nov. 2014

Research Professional

Québec, Qc, Canada

- NSERC FONCER-INFRA research program: managed research projects, provided guidance to graduate students.
- Developed practice problems for the Prestressed Concrete graduate course.

NSERC ENGAGE Research Project

Jan. 2014 – Sept. 2014

Research Assistant

Québec, Qc, Canada

Towards an Improved Design Procedure for Incorporating Soil-Structure Interaction in Seismic Performance Evaluation. PI: Dr. Charles-Darwin Annan

- Reviewed the literature on material and component mathematical models.
- Developed the mathematical analytical model.
- Co-author of project report submitted to NSERC and a partnering consulting firm.

TEACHING

McGill University

Summer 2023

Lecturer

Montréal, Qc, Canada

• Business Statistics (MGCR 271).

McGill University

Teaching Assistant

Sept. 2020 - Dec. 2021

Montréal, Qc, Canada

• Operations Management (MGCR 617–MBA and MMA programs)

Université Laval

Jan. 2014 - May 2014

Lecturer – Steel Desing Québec, Qc, Canada

• Design and lead lectures for a class of 170 students.

• Responsible for writing the final exam.

Université Laval Teaching Assistant Sept. 2012 – Aug. 2014

Québec, Qc, Canada

• Structural Analysis (2012), Steel Design (2012, 2013), Structural Damage Diagnosis and Repairs (2013).

SUPERVISION

MITACS GLOBALINK Internship

May 2015 – Aug. 2015

Neha Madhulika and Vamshi Kadumuri, Université Laval

Québec, Qc, Canada

• Provided supervision and guidance to Neha and Vamshi, whose internship was aimed at extending the findings of my Master's thesis.

EXAMINATION COMMITTEE MEMBERSHIP

Masters Examination Committee

• Constance Efio-Akolly (2021) - Département de génie civil et des eaux, Université Laval.

AWARDS & SCHOLARSHIPS

Sawtooth Academic Grant

2023

Sawtooth Software

Graduate Mobility Award

2022

Graduate and Postdoctoral Studies - McGill University

\$11,500

• The Graduate Mobility Award encourages graduate students to study and conduct research abroad. A limited number of awards, funded by the Government of Quebec, are available each year on a competitive basis.

MSRC Performance Award—Honorable Mention

2021

Management Science Research Center (MSRC) - Desautels Faculty of Management

\$2,000

• Awarded by the MSRC to the best PhD student project proposal.

Walter John Stenason Fellowship

2019-2020

Desautels Faculty of Management

\$10,000

• Awarded by Graduate and Postdoctoral Studies upon the recommendation of the Desautels Faculty of Management to outstanding Canadian Ph.D. students.

PhD Program in Management Guaranteed Funding Award (MGFA)

2019-2023

Desautels Faculty of Management

\$30,000/year

Honour List - Master's Thesis

2015

Faculty of Graduate and Postdoctoral Studies, Université Laval

• The Honour List includes graduates of a thesis master's program whose theses received a unanimous grade of "excellent".

Funding for scientific cummunication

2014

Association des étudiant(e)s de Laval inscrits aux études supérieures (AELIES), Université Laval \$500

• Funding provided to present and attend the CSCE 2014 4th Int. Structural Speciality Conference.

Merit Research Scholarship

2013, 2014

Faculty of Graduate and Postdoctoral Studies, Université Laval

\$200, \$300

• Awarded to graduate students who complete the stages of their program on time.

NON-ACADEMIC WORK EXPERIENCE

LERA Consulting Structural Engineers

Nov. 2014 - July 2019

Design Engineer & Project Manager

New York City, NY, USA

- Managed in-house teams of several engineers and interns.
- Managed design development with Owners, Architects, Service Engineers and Contractors.
- Founder and Project Lead for LERA Tools: Committee developing and standardizing design & optimization tools, and workflows, to be used office-wide.
- Designed, analyzed, and optimized complex structural systems. Researched on analysis methods, materials and systems modelling, international and local building codes, construction methods and available materials.
- Authored and co-authored design narratives, calculation packages, peer-review and forensics reports.

VOLUNTEERING WORK

Architect Registration Exam (ARE) Program

2019

Lecturer

New York City, NY, USA

• LERA-based initiative: Engineers providing structural engineering lessons and tutoring to architectural professionals in preparation for their board exam.

Fashion Revolution USA

2018

Consultant

New York City, NY, USA

- Advise on the development of the High School Upcycle Competition.
- Volunteer during the Fashion Revolution Week 2018

ACE Mentor Program of America

2017 - 2019

Office Team Leader

New York City, NY, USA

• Mentoring High School students and promote careers in STEM, specifically in Architecture/Construction/Engineering (ACE).

Project JUST

2016 - 2018

Researcher

New York City, NY, USA

• Research on ethically and environmentally sustainable practices of fashion brands, published on the website's wiki.

SKILLS & TECHNICAL STRENGTHS

Programming

Python, R, IATEX, HTML, CSS, C++, bash, Matlab, SQL, JavaScript

Softwares Languages LimeSurvey, Sawtooth

ges French, English

Peer-Reviewed Conference Publications

- 1. **Matte, J.-S.**, Annan, C. D., Bastien, J., (2014) Seismic behaviour of multi-storey buildings with asymmetric setback. *Proc.* 4th International Structural Specialty Conference, Halifax, Canada, Paper CST106, 10pp.
- Hassan, M.H., Annan, C.-D., Matte, J.-S., (2013) Finite Element Analysis of Cable-Stayed Bridges under the Effect of Accidental Loss of a Stay Cable. Proc. CSCE 2013 General Conference, Montréal, Canada, Paper GT43, 12pp.

Research Reports

1. Annan, C.-D., Kalyan, S., Raman, T., Saberi, M., Matte, J.-S., (2014) Towards an Improved Design Procedure for Incorporating Soil-Structure Interaction in Seismic Performance Evaluation., NSERC ENGAGE Grant EGP 459267-13, 44pp.

Working Papers

1. Something on product variety (with Javad Nasiry and Mehmet Gumus).

Work in Progress

- 1. Consumer valuation and business decisions for lowering environmental impacts in the fashion industry (with Robert Rooderkerk and Mehmet Gumus).
- 2. "rume: Random Utility Model Estimation for Large Data Sets in R"

Presentations

- 1. INFORMS MSOM 2023: Matte, J.-S., Gumus, M., Nasiry, J., Product Variety in Online Fashion Retailing. McGill University, Montréal, Canada, June 25-26, 2023.
- 2. 5th Meeting of the EURO Working Group (EWG) on Retail: Matte, J.-S., Nasiry, J., Gumus, M., Product Variety and Consumer Behaviour in Online Fashion Retailing. Koç University, Istanbul, October 12-13, 2022.
- 3. 32nd Annual POMS Conference: Matte, J.-S., Nasiry, J., Gumus, M., Product Variety and Consumer Behaviour in Online Fashion Retailing. Online, April 21-25, 2022.
- 4. CSCE 2014 4th Int. Structural Speciality Conference: Matte, J.-S., Annan, C.-D., Bastien, J., Seismic Behaviour of Multi-Storey Buildings with Asymmetric Setback the Effect of the Level and the Degree of Setback. Halifax, Canada, May 2014.
- CSCE 2013 General Conference: Hassan, M.H., Annan, C.-D., Matte, J.-S., Finite Element Analysis of Cable-Stayed Bridges under the Effect of Accidental Loss of a Stay Cable. Montréal, Canada, May 2013.

Poster Presentations

1. Colloque du Centre d'études interuniversitaire des structures sous charges extrêmes (CEISCE) 2014: Matte, J.-S., Comportement sismique des bâtiments avec retrait excentré en élévation. Université Laval, Québec, Canada, May 2014.

Talks

- 1. RSM Marketing Consumer Club: Matte, J.-S., Rooderkerk, R., Willingness-to-pay for sustainability in fashion. Rotterdam School of Management–Erasmus University, Rotterdam, March 16, 2023.
- 2. The Engineering Challenges of World Trade Center Tower 4: Matte, J.-S. Presentation to MIT graduate students. LERA, New York City, NY, USA, Jan. 2019.