

# JEAN-SÉBASTIEN MATTE

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Desautels Faculty of Management

1001 Sherbrooke St W, Montreal, Quebec H3A 1G5

## EDUCATION

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**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

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**Rotterdam School of Management–Erasmus University**

*Sept. 2022 – present*

*Visiting PhD Student*

*Rotterdam, Netherlands*

Host & Collaborator: Prof. Robert Rooderkerk

## RESEARCH & ACADEMIC EXPERIENCE

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**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

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**McGill University**

*Sept. 2020 - present*

*Teaching Assistant*

*Montréal, Qc, Canada*

- Operations Management (MBA and MMA programs)

**Université Laval***Lecturer – Steel Desing*

Jan. 2014 – May 2014

*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***Neha Madhulika and Vamshi Kadumuri, Université Laval*

May 2015 – Aug. 2015

*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***Sawtooth Software*

2023

**Graduate Mobility Award***Graduate and Postdoctoral Studies - McGill University*

2022

*\$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***Management Science Research Center (MSRC) - Desautels Faculty of Management*

2021

*\$2,000*

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

**Walter John Stenason Fellowship***Desautels Faculty of Management*

2019-2020

*\$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)***Desautels Faculty of Management*

2019-2023

*\$30,000/year***Honour List - Master's Thesis***Faculty of Graduate and Postdoctoral Studies, Université Laval*

2015

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

- Funding for scientific communication** 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

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- 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

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- 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

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<b>Programming</b>	Python, R, L <sup>A</sup> T <sub>E</sub> X, HTML, CSS, C++, bash, Matlab, SQL, JavaScript
<b>Softwares</b>	LimeSurvey, Sawtooth
<b>Languages</b>	French, English

## PUBLICATIONS, PRESENTATIONS & TALKS

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### 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.
2. 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).
2. “**rume**: Random Utility Model Estimation for Large Data Sets in R”

### Presentations

1. *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.
2. *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.
3. *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.
4. *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.