

# MAHSA MOGHADDASS

mahsa.moghaddass@gmail.com

6 Eva road, Toronto, Ontario, Canada

514-677-6548

## HIGHLIGHTS OF QUALIFICATIONS

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- Strong in Data-Driven Optimization, Operations Research & Decision-Making Under Uncertainty.
- Ability to Translate Raw Data into Business Insights Using Data Analytics & Visualization.
- Expert in Predictive Analytics Using Machine Learning & Optimization Techniques.
- Highly Experienced in Recommender Systems (e.g., Predicting Customers Behaviors).
- Solid Knowledge and Experience in using C++, Python, SQL, Tableau, MS Office.
- Strong Organizational, Interpersonal, Analytical & Problem Solving Skills.
- Excellent Oral & Written Communication Skills in English and French.
- Ability to Work Both Independently & Collaboratively as an Effective Team Member.
- Time & Detail Oriented, Highly Motivated, Quick-Learner, Self-Driven, Multi-Task & Energetic.

## WORK EXPERIENCE

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### **Graduate Research Assistant, Data Analytics**

May 2016 - April 2020

*Data-Driven Operations Research Lab, Concordia University, Montreal, Canada*

- Designed mathematical optimization & predictive models & algorithms to solve complex problems.
- Worked with software & packages in Python (pandas, seaborn, matplotlib, sklearn), MS Office.
- Applied data-driven techniques to predict customers' behaviors and optimize their decisions.
- Provided optimal recommendations to help increase customer engagement and leverage business profits.
- Worked with C++, Python, CPLEX (optimization software), Excel.

### **Instructor & Teaching Assistant**

Sept 2016 - April 2020

*Concordia University, Montreal, Canada*

- Teaching Operations Research, Production Planning, Manufacturing Systems & Design, CPLEX.

### **Data Analyst**

Jan 2015 - Feb 2016

*KARPIRA International Recruitment Agency, Mashhad, Iran*

- Provided data cleaning, analytics and visualization to recommend clients the best services.
- Communicated with suppliers and clients frequently to connect them in a best way.
- Worked with SQL & MS office.

### **Business Analyst, Marketing Consultant**

Jan 2013 - Jan 2014

*Grand Group Holding Company, Mashhad, Iran*

- Provided marketing research & campaign & SWOT analysis for the company.
- Interacted with market & clients to update the systems continuously.
- Applied data visualization and analytics to provide business strategies.
- Helped the company know their customers and demands well and provide services based on their needs.
- Worked with SQL, MS Office & CRM.

## VOLUNTEER EXPERIENCE

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### **Mentorship Program Coordinator & Leader**

June 2018- Sept 2019

*Mechanical, Industrial & Aerospace Engineering Dept, Concordia University*

*Montreal, Canada*

- Coordinated seminars, managed teams and mentored first-year Ph.D. students in the department.
- Organized high-level academic workshops, seminars, and events

## EDUCATION

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### **Ph.D., Industrial Engineering (Operations Research), (GPA: 4.1/4.3)**

2016 -Mar 2020

*Gina Cody School of Engineering and Computer Science, Concordia University*

*Montreal, Canada*

- Thesis title: Inverse Integer Optimization With an Application in Recommender Systems.

### **M.Sc, Industrial Management (Production), (GPA: 17.30/20)**

2011 – 2013

*Department of Economics and Business Administration, Ferdowsi University*

*Mashhad, Iran*

- Thesis title: Optimization and Prioritization of Maintenance Strategies Using Interval AHP & LP.

### **B.Sc, Business Administration, (GPA: 18.05/20)**

2007 – 2011

*Department of Economics and Business Administration, Ferdowsi University*

*Mashhad, Iran*

## SKILLS

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### **Software Skills**

C++, Python, SQL, CPLEX (optimization software), MS Office(Excel, PowerPoint), Tableau

### **Languages**

English , French (level: B2)

## AWARDS & HONORS

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### **Concordia University Accelerator Award**

*Aug 2019*

### **Concordia University Conference and Exposition Award**

*May 2019 & May 2018*

### **Concordia University Best Industrial Engineering Ph.D. Poster Award**

*April 2019*

### **Canadian Operational Research Society (CORS) Graduate Funding Award**

*June 2018*

*CORS Annual Conference*

*Halifax, Canada*

### **Concordia University International Tuition Award of Excellence**

*Aug 2019*

### **Eligible to Pursue Master's Study Without Entrance Exam (Outstanding Student)**

*Jan 2011*

*Ferdowsi University*

*Mashhad, Iran*

## JOURNALS

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### **Data-Driven Inverse Optimization for Recommender Systems &**

### **Inverse Integer Optimization with Multiple Observations**

*M. Moghaddass and D. Terekhov, Under review at Optimization Letters Journal*

### **Inverse Integer Optimization with an Imperfect Observation**

*M. Moghaddass and D. Terekhov, Under second review at Operations Research Letters Journal*

## WORKSHOPS & CERTIFICATES

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### **Python for Data Science and Machine Learning BootCamp**

*Jan 2020*

*UDEMY online course, (NumPy, Pandas, Seaborn, Matplotlib, Plotly, Scikit-Learn, Machine Learning)*

### **Tableau Training For Data Science**

*June 2020*

*UDEMY online course, (Data visualisation skills)*

### **Workshop on Recommender Systems**

*Aug 2019*

*IVADO, HEC Montreal, Canada (Learning recommender systems and Algorithms in Python)*