MAHSA MOGHADDASS

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6 Eva road, Toronto, Ontario, Canada

514-677-6548

HIGHLIGHTS OF QUALIFICATIONS

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 O ce.

Strong Analytical & Problem Solving Skills & Experience in Using Complex & Large Data Sets. Excellent Interpersonal Skill, Oral & Written Communication Skills in English and French.

Ability to Work Both Independently & Collaboratively as an E ective Team Member.

Time & Detail Oriented, Highly Motivated, Quick-Learner, Self-Driven, Multi-Task & Energetic.

Graduate Research Assistant, Data Scientist May 2016 - April 2020

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

Designed mathematical optimization & predictive models & algorithms to solve complex problems.

Provided patterns or trends by data pre-processing, analytics, & visualization in Python, R, & Excel. Applied optimization & machine learning (supervised, unsupervised) to predict customers’ preferences. Applied data-driven models & algorithms to optimize recommender systems & decision-making.

Proposed a contextual-based recommender system platform to optimize new customers’ choices .

Worked with C++, Python (pandas, seaborn, matplotlib, sklearn), CPLEX , MS O ce, Latex.

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 cleansing, analytics and visualization to recommend clients the best services. Communicated with suppliers and clients frequently to optimize their requirements.

Worked with SQL & MS o ce.

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 O ce & CRM.

VOLUNTEER EXPERIENCE

Mentorship Program Coordinator & Leader

Mechanical, Industrial & Aerospace Engineering Dept, Concordia University

June 2018- Sept 2019 Montreal, Canada

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

EDUCATION

Ph.D., Industrial Engineering (Operations Research), (GPA: 4.1/4.3) Gina Cody School of Engineering and Computer Science, Concordia University

2016 -Mar 2020 Montreal, Canada

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

M.Sc, Industrial Management (Production), (GPA: 17.30/20) Department of Economics and Business Administration, Ferdowsi University

2011 { 2013 Mashhad, Iran

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

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

Department of Economics and Business Administration, Ferdowsi University

2007 { 2011 Mashhad, Iran

SKILLS

Software Skills

C++, Python, SQL, CPLEX (optimization software), MS O ce(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

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, Accepted in 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 advanced recommender system algorithms in Python)