TOM WRIGHT
Cambridge, MA

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EDUCATION

MIT SLOAN SCHOOL OF MANAGEMENT   Cambridge, MA
Candidate for Master of Business Analytics, Operations Research Center, August 2023   Aug 2022 - present
- Coursework: Machine Learning, Optimization Methods, Integer Optimization, Sensorimotor Learning, Analytics Lab
- Machine Learning Project: Prescribed transfer action for soccer clubs via regression and optimization (Python, Julia)
- Optimization Project: Built a mixed-integer model optimizing class happiness while ensuring everyone passes (Julia)
- Leadership: Elected Class President of MBAn Class of 2023, Sloan Senate and Health & Wellness Committee member

MCGILL UNIVERSITY   Montreal, QC
Bachelor of Science in Statistics and Computer Science   Sep 2017 - May 2022
- Coursework: Reinforcement Learning, Probabilistic Programming, Stochastic Processes, Algorithm Design
- Machine Learning for Climate Change Project: Studied how weather data affects probabilistic demand forecasts (Python)
- J. W. McConnell Scholar - Major Renewable Academic Scholarship

TECHNICAL SKILLS

Julia | JuMP | Python | PyTorch | TensorFlow | R | Java | SQL | HTML | CSS | JavaScript | AWS | Git | LaTeX | Gurobi

EXPERIENCE

MIT OPERATIONS RESEARCH CENTER   Cambridge, MA
Research Assistant to Professor Alexandre Jacquillat   Sep 2022 - present
- Applying stochastic-robust optimization to supply chain management tasks for a large e-commerce company (Julia)
- Conducting sensitivity analyses on model parameters for tuning and to validate results
- Architecting multi-objective problem formulations to meet client requirements and targets
- Reduced costs compared to baselines by up to 30% through implementation of a deterministic model

MIT SLOAN | BALYASNY ASSET MANAGEMENT (BAM)   Cambridge, MA
Analytics Lab Team Member   Sep 2022 - Dec 2022
- Partnered with BAM's energy trading desk to enhance physical weather model uncertainty predictions (Python)
- Applied time series, sparse regression and tree-based techniques, improving performance over baselines by up to 55%
- Analyzed geographic and temporal relationships via feature differencing, interpretable modeling and variable importance
- Communicated key findings and presented to an audience of fellow students, professors and industry professionals

MONTREAL INSTITUTE OF LEARNING ALGORITHMS | MCGILL   Montreal, QC
Research Assistant to Professor David Rolnick and Priya Donti   Sep 2021 - Apr 2022
- Researched deep learning frameworks for the Unit Commitment problem found in power systems research (Python)
- Spearheaded project first stage, extending work on deep learning for nonlinear optimization to an integer setting
- Conducted background reading, built Git repository, collected data and wrote documentation for project second stage

INVENIA LABS   Winnipeg, CAN / Cambridge, UK
Small research company applying machine learning and operations research techniques to optimize the electrical grid
Research Intern   May 2021 - Aug 2021
- Led development of an open-source package implementing an efficient class of multi-output Gaussian Processes (Julia)
- Increased function speeds by up to 75 times while cutting down lines of code by a factor of 10
- Collaborated with open-source communities while ensuring in-house requirements were met

Software Engineer Intern   May 2020 - Dec 2020
- Developed cloud-computing infrastructure to enhance use of AWS tools (Sagemaker)
- Designed a package to predict release dates, as well as developed implementation infrastructure (Julia)

ADDITIONAL INFORMATION

- Languages: French (fluent)
- Member of Youth Advisory Board educating campus communities on issues relating to sexual violence (2019-2021)
- Ultimate Frisbee: World Championships (2018), UK Championships (2021), Canadian Championships (2016-2021)
- Interests: Icelandic horse rider, aspiring rock climber, birthday cake baker, amateur singer-songwriter