

Tony Tohme

CONTACT INFORMATION	E17-352, 40 Ames Street Cambridge, MA 02142, USA	tohme@mit.edu +1(857)308-8446
EDUCATION	Massachusetts Institute of Technology Ph.D. Candidate in Computational Science and Engineering Advisor: Kamal Youcef-Toumi, GPA: 5.0/5.0 M.S. in Computational Science and Engineering Advisor: Kamal Youcef-Toumi, GPA: 5.0/5.0 <i>MathWorks Prize for Outstanding Master's Research</i> American University of Beirut B.Eng. in Electrical and Computer Engineering Graduated with High Distinction, GPA: 4.0/4.0	Cambridge, MA, USA June 2020 – Present Sept 2018 – May 2020 Beirut, Lebanon Sept 2014 – June 2018
WORK EXPERIENCE	Morgan Stanley – Equity Strats Division Incoming Quantitative Research Intern DRW – FICC Options Team Quantitative Research Intern Implemented a reinforcement learning market impact simulator. Mitsubishi Electric Research Laboratories Research Intern Implemented a generalized symbolic regression approach to recover mathematical expressions and/or physical laws. Massachusetts Institute of Technology Graduate Research Assistant Developed BVM, a Bayesian model-data Validation Metric. Developed GSR, a Generalized approach for Symbolic Regression tasks. Undergraduate Research Assistant Worked on a robot learning project.	New York, NY, USA June – Aug 2023 Chicago, IL, USA June – Aug 2022 Cambridge, MA, USA June – Aug 2021 Cambridge, MA, USA Sept 2018 – Present June – Aug 2017
PUBLICATIONS	Tohme, T. , Liu, D., and Youcef-Toumi, K., 2022, <i>GSR: A Generalized Symbolic Regression Approach</i> , Transactions on Machine Learning Research (TMLR). Tohme, T. , Vanslette, K., and Youcef-Toumi, K., 2022, <i>Reliable Neural Networks for Regression Uncertainty Estimation</i> , Reliability Engineering and System Safety, Volume 229. Tohme, T. , Vanslette, K., and Youcef-Toumi, K., 2020, <i>A Generalized Bayesian Approach to Model Calibration</i> , Reliability Engineering and System Safety, Volume 204. Tohme, T. , 2020, <i>The Bayesian Validation Metric: A Framework for Probabilistic Model Calibration and Validation</i> , Massachusetts Institute of Technology, USA. Vanslette, K., Tohme, T. , and Youcef-Toumi, K., 2020, <i>A General Model Validation and Testing Tool</i> , Reliability Engineering and System Safety, Volume 195.	

HONORS AND AWARDS	MathWorks Engineering Fellow, MIT	2020 – 2021
	MathWorks Prize for Outstanding Master’s Research, MIT	2020
	Dean’s Honor List and High Distinction, AUB	2014 – 2018
	Social Entrepreneurship Hackathon Winner, AUB	2017
	Lebanese Second National Science Olympiad: Rank 3	2016

COMPUTER SKILLS Proficient in Python (NumPy, Matplotlib, Pandas, SciPy, Scikit-learn, PyTorch, TensorFlow, OpenCV), MATLAB. Experience in C++, Julia.

LANGUAGES Proficient in English, French. Native in Arabic.

REFERENCES **Kamal Youcef-Toumi**, Professor of Mechanical Engineering, MIT
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