Dear MBAn Class of 2026,

Welcome to **15.003 Analytics Software Tools**! Over the course of this month, we will hold several sessions to get you familiar with different programming languages, software tools, and analytics/mathematical topics.

The Orientation part of this course will be taught in three days:

**August 20th:** Linear Algebra review

**August 21st:** Introduction to Optimization (in Julia)

**August 26th:** Basic machine learning models in Python and Github/command line

**Before the first class**, we ask that everyone completes the pre-assignment (link [here](https://github.com/lisaxeverest/15.003_Fall2025/blob/main/preassignment.md)), which will get you set up with the tools you need for the week (Julia/JuMP/Gurobi, Github). In addition, if you are new to programming, please go through tutorials that will introduce (link [here](https://github.com/lisaxeverest/15.003_Fall2025/tree/main/intro_to_python)). These tutorials use Jupyter notebooks, which you can run locally on your laptops or on [Google Colab](https://colab.research.google.com/) by importing them there. Google Colab is a free cloud-based service that provides a Jupyter Notebook environment for running Python code; please note that any data files must be uploaded to Google Colab in order to be read by the provided code. If you are unfamiliar with Jupyter Notebook, you may find [this link](https://jupyter-notebook.readthedocs.io/en/stable/examples/Notebook/Running%20Code.html) helpful for documentation. Finally, some additional Python resources include: [python.org tutorial](https://docs.python.org/3/tutorial/index.html) and [geeksforgeeks.org tutorial](https://www.geeksforgeeks.org/python/python-programming-language-tutorial/).

If you run into any issues or have any questions, please first try your best to debug via Google search, ChatGPT, or ask your classmates. If the issues persist, feel free to email Lisa (for Python/Github questions, [leverest@mit.edu](mailto:leverest@mit.edu)) or Sean (for Julia/JuMP/Gurobi questions, [seanlo@mit.edu](mailto:seanlo@mit.edu)).

Your teaching team,

Lisa Everest and Sean Lo