AMS 595: Fundamentals of Computing: Part II
Lecture 7: Symbolic and Numerical Computations

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Symbolic Computation with SymPy

- SymPy is a Python library for symbolic mathematics
- It is computer algebra system (CAS), similar to Maple, Mathematica, and MATLAB's Symbolic Toolbox
- See Jupyter notebook on SymPy

Numerical Computation with SciPy

- SciPy libraryis part of SciPy software stack
- It provides efficient numerical routines such as routines for numerical integration and optimization.
- See Jupyter notebook on SciPy