

18.337/6.338

Modern Numerical Computing with

MW 2-3:30 pm -- Room: 4-237

Prof. Alan Edelman &

Visiting Prof. David P. Sanders



Numerical computing is no longer just about special algorithms. This course shows that language, normally considered a detail, is at the forefront of speed, usability, and research.

We will discuss research questions that will help understand why high performance computing has been so hard, and what Julia is doing to fix this.

Topics:

- **Why is Julia fast?**
- **Machine Learning**
- **Linear Algebra**
- **Composable abstractions**
- **SVD, FFT, optimization**
- **Parallel computing**
- **Visualization**

