Lecture 15

QR Day, how to compute a QR factorization.

Quick QR Recap
- Solving Least Squares via QR
- Computing a null-space via QR

A 2x2 Orthogonal Matrix is often called a Givens rotation and it’s computed from sines and cosines.

BUT WE DON'T EVER USE THEM!

We can use 2x2 Orthogonal matrices to compute a QR factorization.
So we'll show how to assemble these 2x2 into a full QR factorization!

Then we'll show how to use a generalization called a Householder matrix to do the same thing.

Householder matrices have a nice interpretation in terms of variable elimination for Least squares.

Summary of Midterm!!