Syllabus of CS152A

September 25, 2020

- Basic linear algebra, Least square, Numerical optimization;

- Basic geometry fitting, RANSAC;

- Filters, Basics of CNNs, Back-propagation;

- Corner detection;

- Camera model, PnP pose estimation, Fundamental matrix, Panorama;

- Image classification, Bias/variance tradeoff;

- PCA, Auto-encoder;

- Optical flow, Background removal.