

Structure from Motion

Pinhole Camera: Test
Homogenous Coordinates: Test
Intrinsic Parameters: Test
Extrinsic Parameters: Test
Epipolar Geometry: Test

Camera Calibration

Rig: Test

Stereo Matching

Binocular Stereo: Test
Window Search: Test
Markov Random Field: Test
Graph Cut: Test

Image Classification

Test: Test

KNN

Hyperparameters: K and Norm(L1 better, reduces background noise)
Pros: Test
Cons: Test
Curse of Dimensionality: Test

SVM

Linear Classifier: Test

AdaBoost

Test: Test

Viola-Jones Face Detector

Test: Test

Decision Tree

Test: Test

Neural Network

Activation Function: Test
Convolutional: Test
Output Size: Test
Stride: Test
Padding: Test

Object Detection

Test: Test

Active Contour

Test: Test

Semantic Segmentation

Markov Random Field: Smooth
Sliding Window: Approach 1
Fully Convolutional: Approach 2

Instance Segmentation

Test: Test

Generative Models

Generative Adversarial Networks: Test
Variational Autoencoder: Test