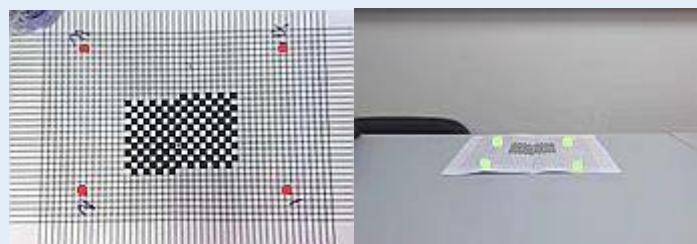


Close-range RGB Capture

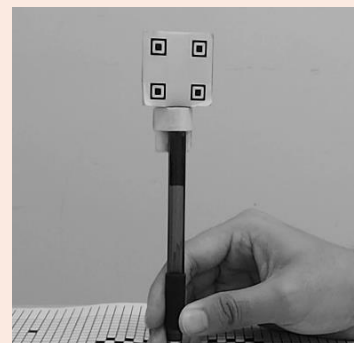


Long-distance Real-time Capture

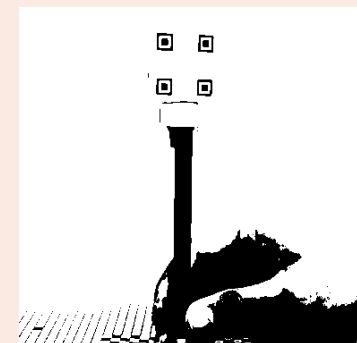


Feature Point Matching

Mapping to Initial RGB Image



Grayscale Conversion



Binarization



Patch Localization

Inference of Current Tip Position



Inference of Initial Tip Position

