

A MATLAB pipeline for hydrogel bead detection

Alexandre S. Avaro

June 26, 2025

This document explains how to use the bead tracking and quantification tool based on MATLAB. This code uses image morphology tools to count beads and quantify signal in fluorescence microscopy images.

1 Requirements

You will require the following to run the code:

- A local MATLAB install. ESPCI provides a free MATLAB license to any user with an ESPCI email adress. See [here](#) to install MATLAB and get started.
- The code `main.m` along with the helper function `impaint_nans.m`.