2D EM montage tile stitching

6-27-2025

David Alston (david.alston@louisville.edu

2025

Contents

[Overview 2](#_Toc201920212)

[Creating the tile configuration file 3](#_Toc201920213)

[Running the stitching plugin 4](#_Toc201920214)

[Notes and tips 5](#_Toc201920215)

# Overview

This document plus the code it comes with is designed to stitch 2D EM images taken as individual tiles. The code takes a folder of tifs plus an .idoc/.mdoc file and builds a custom tile configuration file for use with the FIJI grid stitching plugin (Preibisch, S., Saalfeld, S., & Tomancak, P. (2009). Globally optimal stitching of tiled 3D microscopic image acquisitions. Bioinformatics, 25(11), 1463–1465). The final output is a stitched image that can be opened with FIJI, and then saved to a .tif itself.

# Creating the tile configuration file

1. First, open MATLAB and switch your current folder to the one with the tile configuration script (build2DTileConfigForStitchingFromDOC.m):A screenshot of a computer

   AI-generated content may be incorrect.

# Running the stitching plugin

# Notes and tips

* Before capturing