

GPDQ Documentation

Release 0.0.0

Luis de la Ossa

diciembre 14, 2018

Table of Contents

1	Quickstart: GUI App	3
2	Projects	5
3	Utility Functions	7
4	Creating New Modules	9
5	Code	11
6	Snippets	13
7	Requirements	15
8	Credits	17
8.1	Author	17
8.2	Contributors	17
9	License	19

GPDQ (Gold Particle Detection and Quantification) is a tool for the analysis of images obtained by immunogold labeling.

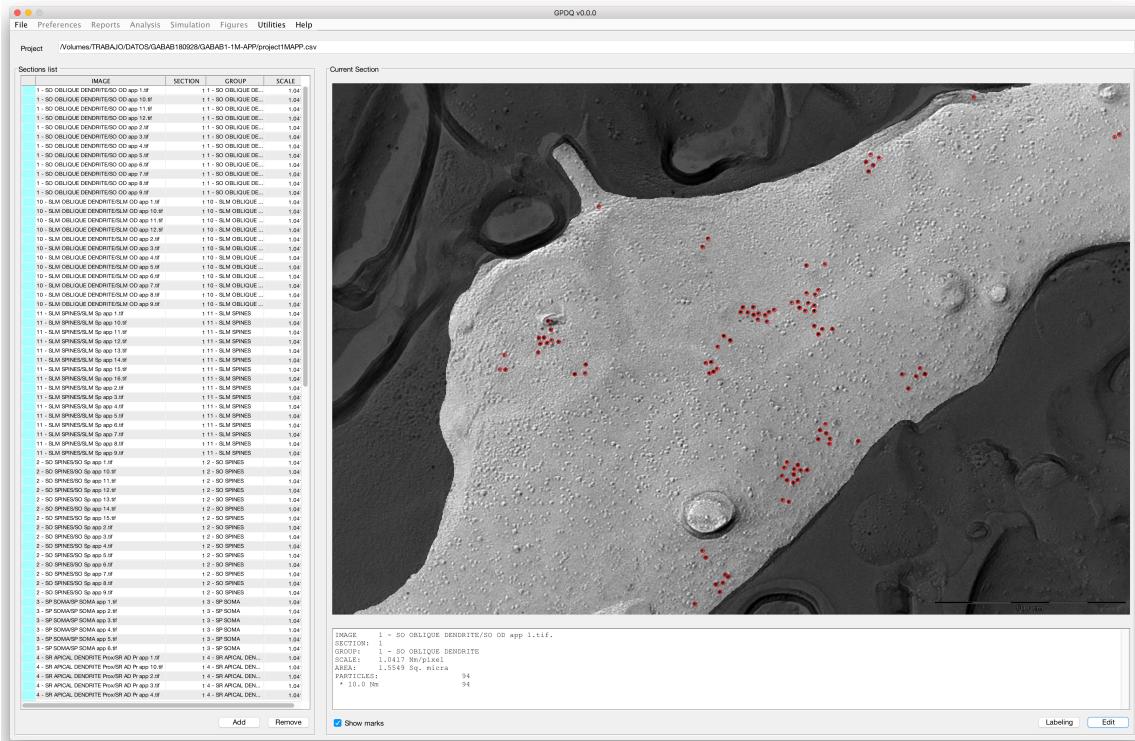


Figure 1. Main application for project management.

Provides functionalities for:

- Managing projects and experimental series
- Automatic and semiautomatic labeling of images
- Basic image processing
- Analyzing data
- Generating and exporting reports.

The Matlab APP covers the whole analysis process, and uses a transparent representation of the information (structures, images and csv files) so that it can be used as well as a set of objects and functions that complement the work with other tools or statistical packages.

```
project = GPDQProject.readFromFile('DATA/GABAB1-6M-WT/','project.csv');  
report = reportNNStats(project.getProjectData(),2);  
report.save('GABAB1-6M-WT.csv');
```

Quickstart: GUI App

Brief description of the main application

Projects

Description of a project, how it is structured

Utility Functions

How to use each function separately

Creating New Modules

How specific modules can be created

Code

Packages

Snippets

Packages

Note This is a note box (blue)

And so on

Requirements

GPDQ v1.0.0 has been written on Matlab R2018b. It requires these toolboxes:

- Image Processing Toolbox (Version 10.3)
- Parallel Computing Toolbox (Version 6.13)

Credits

8.1 Author

- Luis de la Ossa (luis.delaossa@uclm.es)

8.2 Contributors

- Rafael Lujan
- Carolina Aguado

License

MIT License

Copyright (c) 2018 Luis de la Ossa. University of Castilla-La Mancha (Spain).

Permission is hereby granted, free of charge, to any person obtaining a copy of this software and associated documentation files (the "Software"), to deal in the Software without restriction, including without limitation the rights to use, copy, modify, merge, publish, distribute, sublicense, and/or sell copies of the Software, and to permit persons to whom the Software is furnished to do so, subject to the following conditions:

The above copyright notice and this permission notice shall be included in all copies or substantial portions of the Software.

THE SOFTWARE IS PROVIDED "AS IS", WITHOUT WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT. IN NO EVENT SHALL THE AUTHORS OR COPYRIGHT HOLDERS BE LIABLE FOR ANY CLAIM, DAMAGES OR OTHER LIABILITY, WHETHER IN AN ACTION OF CONTRACT, TORT OR OTHERWISE, ARISING FROM, OUT OF OR IN CONNECTION WITH THE SOFTWARE OR THE USE OR OTHER DEALINGS IN THE SOFTWARE.

