Image Processing with ImageJ

Discover the incredible possibilities of ImageJ, from basic image processing to macro and plugin development

José María Mateos Pérez
Javier Pascau
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## Chapter 3: Advanced Image Processing with ImageJ

### Selecting regions of your image
- Basic selections — lines, length, and profiles
- Drawing regions of interest over an area
- The ROI manager and the image overlay

### Filters
- Image filtering in the spatial domain
  - Edge detection
- The Fourier transform
- Image filtering in the frequency domain

### Particle analysis

### Summary

## Chapter 4: ImageJ Macros

### What is an ImageJ macro
- The macro recorder

### Running macros
- Modifying a recorded macro

### More about the macro language — basic syntax and operators
- Variables
- A brief note on debugging a macro
- Control structures
  - The for loop
  - The while loop
    - The if (condition) and if (condition) ... else statements

### Defining functions

### Some useful procedures
- Opening an image from a macro
- Finding out how many images are open
- Obtaining the dimensions of an image
  - A note on slices, frames, and channels
- Selecting a specific image
- Speeding up a macro

### Adding a GUI to your macro
- The batch mode

### Installing macros for easy access
- Shared macros — the ImageJ macro directory

### Summary
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