

Name:



Project sheet

Starting a new image analysis project? We recommend that you think about the aspects below to ensure that your project specifications are clear.

Goals

What is your main scientific question?

Your notes

How can image analysis help you answer that question? Describe the desired outcome of your analysis.

What do you hope to accomplish besides your main goal? Examples: creating a custom data visualization, distributing a software package for others, etc.

Data

Content - Make an inventory of the content of your images. Are there regions of interest (ROIs)?

Quality - Are there artefacts in your datasets? How much noise is there in the images?

Quantity - How many images do you have to analyze? What is the data volume?

Distribution - How do different images in your data set compare to one another? What is causing the differences?

Constraints

Performance - What is the minimum acceptable accuracy for your measurement?
How are you going to evaluate the accuracy of your method?

Automation - Which parts of your image analysis have to be automated, and to what extent?

Operation - How fast does the analysis have to run? What hardware do you have access to?

Other aspects

Team - Are there people around you who can help you in your project?

Skills - What skills do you have (software, programming...) and wish to learn?

Commitment - How much time and effort can you put into developing a solution?

Summary

By now, you should have a clear idea of the goals, data, and constraints of your project. It's time to think about where you're going to focus your efforts.

Make a list of the challenges you foresee and the possible solutions to them. You can also think about how difficult each challenge might be to tackle, so that you can identify the low-hanging fruits.

Challenge	Possible solution
<i>“The images are noisy.”</i>	<i>“Try denoising filters.”</i>

Your progress

It looks like you have a plan! Now, all you have to do is to execute it and see what happens.

Each time you tackle a problem, identify the simplest possible thing that might work and try it first.

Use the space below to take notes of your observations and keep track of your progress.

Your notes