# [Session 3] OpenCV Exercise

### Note

You don't need to solve everything, because it is not mandatory and graded, just for practice! We will provide a solution after the real-time class. But, if you have some problem and ask us, then we will give you some help or hints. **Good luck!** 

## **Exercise 1**

The followings are exercises for practice of basic image processing. As an example, I will use the picture. Just try these by your image



(1.1) Fill with some color (All, left, upper, quarter)



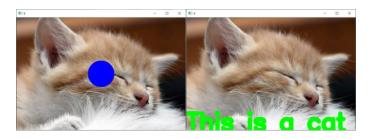
#### (1.2) Small-copy



#### (1.3) Zoom-in (note that window size should be same!



(1.3) Draw something



# **Exercise 2**

You will make an analog clock with OpenCV. You should follow the instruction.

- It is an (circular) analog clock.
- Use **600 x 600** screen size.
- You can freely choose the style.
- Your clock should be faster than real clock, to see if it works well or not. (you can choose any rate)
- You can use **time** library. **time.time()** function: it returns current time (integer: second / float: microsecond)
- Also, you may need **math** library. Representing clock hand may needs a think and math but try by yourself!

This is an example. It should be able to circulate!

