A system to support the amateurs to take a delicious-looking picture of foods

**Background**
- We take a food picture and upload it to SNS.
- It is difficult for amateurs to take a delicious-looking picture of foods.
- Amateurs want an easy-to-use system: after taking a picture, they want to eat soon!

**Purpose**
- The system recognizes foods on the table and suggests a good composition.
- The user arranges the foods based on the suggested composition and takes a delicious-looking picture in a short time.
- We develop the system on a mobile phone with Android OS.

**Method**
- **Food recognition with DCNN**
  - Search the composition from the database.
  - Show it to the user.
  - The user arranges foods.

**Food categories**
- We consider 7 categories of foods according to “dish shape”, “dish size” and “food size”.

**Examples**
- Type:A
- Type:B
- Type:C
- Type:D
- Type:E
- Type:F
- Type:G

**Interface**
- **Shutter button**
- **Symbol of camera tilt**
  - Color of symbol changes to purple if tilt is correct.

**Results**

**Future Work**
- We plan to improve compositions: I do not like the too much space at the top-right corner in the bottom-left figure.
- We will perform subjective evaluations: we will ask subjects to evaluate the usability and the quality of the pictures.
- More image editing: color correction, relighting, focus and defocus, etc...