USING DEEP LEARNING TO ENHANCE COOKING EXPERIENCE

Microwave oven which recognize the food ingredients

SCOPE

- Vegetable recognition engine
- Ingredients recognition engine (chopped/mixed vegetables)
- Drink recognition
- Test environment setup inline with end product environment

CHALLENGES

- Image pre-processing to make it suitable for specific local market requirements
- Visibility issue, poor lighting, camera position
- Porting and optimization for embedded platform
- Custom Architecture development

TOOLS AND TECHNOLOGIES

- TensorFlow
- Custom designed network

AI engine Accuracy	Market	Benefit	Delivery Model	Product phase
95% for all AI modules 16 recipes recognized	Japan	Easy operation Reduced cooking time	ODC	In R&D