

METR4202 -- Robotics

Tutorial 9 – Week 9: SIFT Feature Detection

Reading

Please read/review Lecture 8 (Slides 38-41) as well as the Wikipedia SIFT page.

Software

Please download and install the VL-Feat Toolbox

- METR 4202 website: <http://robotics.itee.uq.edu.au/~metr4202/software/index.html>
- Review the VL-Feat SIFT Tutorial: <http://www.vlfeat.org/overview/sift.html>

Questions

1. Imagine you have just met an alien from Mars, briefly describe a “Beverage Can” to them.

Can you do it in 128 characters?



2. Take 8+ images of the Coca-Cola at various “Yaw” Rotations and import them into MATLAB
3. Use these images to define a SIFT “dictionary” of SIFT “keywords”
4. Use this “dictionary” to help recognize a Coca-Cola can in new and different scene.