

# BBM 415

Fundamentals of Image Processing Lab

Week 1

# Setting up the Environment

- <https://www.quora.com/What-is-the-best-way-to-learn-image-processing-using-Python>
- PyCharm
  - Optional: Spyder
- Libraries:
  - Scikit-image, scikit-learn
  - OpenCV
  - NumPy, SciPy
- Anaconda

# GitHub Classroom for Assignments

- Join assignments from given links
- Final push before the deadline

# Git Usage

- Purpose of git is: versioning
  - You worked on only master branch, but you messed up things in your code, but your colleague was very good at their side.
  - How to revert your mistake, but not his/hers?
- Extra points for correct branch usage (both in assignments and projects)
  - Especially in group projects, if you don't use branches and work on master branch only, probably you will face many difficulties
  - In individual assignments, you may use a different branch for development and then merge on master branch for the parts that you are done
- <http://rogerdudler.github.io/git-guide/>
- Use .gitignore

# GitLab for BBM413 Projects

- <https://git.cs.hacettepe.edu.tr>
  - Create your project's repo with "private" option
  - Add your instructors as "Reporter"
  - Add team members as "Maintainers" ("Developers" cannot push on master branch)
    - <https://docs.gitlab.com/ee/user/permissions.html>
  - `git config --global user.name "<your_name>"`
  - `git config --global user.email "<your_cs_email>"`
  - `git clone http://git.cs.hacettepe.edu.tr/<your\_username>/<your\_project\_name>.git`
  - `git status`
  - `git add .` or `git add <file_name>`
  - `git commit -m "<modifications>"`
  - `git push origin <branch_name>`

# GitLab for BBM413 Projects

- Use your project's GitLab Wiki page for weekly posts
  
- Additional guides:
  - <https://gist.github.com/jbenet/ee6c9ac48068889b0912>
  - <https://medium.com/@jihdeh/simple-git-workflow-graphical-guide-2a1a0ae4e664>