

1. VS Code: <https://code.visualstudio.com/>
2. Python (virtual environment or anaconda):
 - Personally, I use and recommend Anaconda: <https://www.anaconda.com/>
 - Ideally, create and activate a new environment for the seminar: `conda create --name your_env_name`; `conda activate your_env_name`
 - For Python package installations:
 - **On Linux** - Use the commands on the provided Anaconda webpages
 - **On Windows** - Use the graphical Anaconda application: https://www.youtube.com/watch?v=7_o_kjG1Sfs
3. Python packages (and their use during the seminar):
 - **ipykernel** - To run jupyter notebook: <https://anaconda.org/anaconda/ipykernel>
 - To make the environment available in jupyter notebook: `python -m ipykernel install --user --name=your_env_name`
 - **git** - Demonstration of git functionalities provided by VS Code: <https://anaconda.org/anaconda/git>
 - **ase** - Example package to demonstrate advanced navigation of large code bases: <https://anaconda.org/conda-forge/ase>
 - **black** - Automatic Python code formatting: <https://anaconda.org/conda-forge/black>
4. For the seminar recommended VS Code extensions (extension packs for convenience):
 - **Python extension pack** - Easy linking of conda env, Python Intellisense, etc.: <https://marketplace.visualstudio.com/items?itemName=donjayamanne.python-extension-pack>
 - **Bash extension pack** - IDE features for bash: <https://marketplace.visualstudio.com/items?itemName=lizebang.bash-extension-pack>
 - **Jupyter** - Running Jupyter Notebooks in VS Code: <https://marketplace.visualstudio.com/items?itemName=ms-toolsai.jupyter>
5. Some other useful VS Code extensions:
 - **Search with cursor** - Shortcut to search selected text on Google: <https://marketplace.visualstudio.com/items?itemName=hasefumi23.search-with-cursor>
 - **Kite** - AI-powered code completion: <https://marketplace.visualstudio.com/items?itemName=kiteco.kite>
 - **Error Lens** - Improved language diagnostics and error reporting: <https://marketplace.visualstudio.com/items?itemName=usernamehw.errorlens>
 - **Git File History** - Seamless browsing of different file versions in git history: <https://marketplace.visualstudio.com/items?itemName=pomber.git-file-history>
 - **GitLens** - Extensive additional git annotations: <https://marketplace.visualstudio.com/items?itemName=eamodio.gitlens>
 - **Todo Tree** - Workspace-wide TODOs: <https://marketplace.visualstudio.com/items?itemName=bat67.latex-extension-pack>
 - **LaTeX extension pack** - <https://marketplace.visualstudio.com/items?itemName=bat67.latex-extension-pack>