



LABs Introduction

Lorenzo Ghiro

lorenzo.ghiro@unitn.it

- Provide experience in the implementation of typical algorithms used in distributed systems.
- Gain experience with standard tools and frameworks for
 - modeling & analysis of distributed systems
 - distributed programming
- Hands-on daily used, popular, really useful libraries
- Have fun! ...that's why Python as main programming language :)



- Reliable Broadcast
 - Simple Simulation of BEB, Discrete Event Simulation of Reliable Broadcast
- Epidemic Protocols
 - Introduction to Agent Based Modeling in python with MESA
 - Implementation of a SIR model with MESA
- ...
- Build a blockchain in python

Good to know

- The final grade will be given 50% by the lab projects and 50% by a final (oral) examination.
- Labs website:
<https://lorebz.github.io/labsdistributedsystems2>
- Course website:
<http://cricca.disi.unitn.it/montresor/teaching/ds2>
- Meeting me... send me an email :)
I do not live in Trento but can arrange a meeting somehow if necessary :)

- I work on Ubuntu 20.04
- Python 3.7
 - Anaconda + pip
- PyCharm + SublimeText3
- Sometimes Jupyter Notebooks/Lab

You are free to use any other editor and work on other OSs... this sidenote is just to say that provided code has been tested only under this setup

- Install Anaconda

<https://docs.anaconda.com/anaconda/install/linux>

- Anaconda with Python 3.7

<https://www.anaconda.com/blog/python-3-7-package-build-out-miniconda-release>

- `sudo snap install pycharm-community --classic`

Questions?

