

Paula Contributions

- Research about different topics and finally chose TOR
- Understanding how onion routing and TOR protocol works
- Worked on the whole
- Wrote and created the diagram
- Worked on presentation slides

Along with Sever and Tomas, Anica and I worked continuously on:

- Several organization meeting choosing the topic and organizing the project.
- Defining the structure of the cells and its data types so the four machines involved in the network could be able to understand each other.
- The testing of the functions we implemented of the proxy.

With Anica we worked more deeply in the **onion proxy implementation**:

- Performed the TCP connection with the onion router so packets could be sent. `op.py`
- Which consisted in implementing the process of the different packets that the proxy receives and sending them to the onion router this consisted on the implementation of the file `op_utils.py`.
 - We implemented all the encryption, decryption that the onion proxy had to do. The generation of the first half of Diffie-Hellman key exchange, the encryption and decryption of RSA and AES.
 - Circuit creation initiation method.
 - We implemented the processing of the different relay and control cells and its reaction to each one of the different relay messages.
- We finally had several testing sessions and refactoring sessions to make the code cleaner and more understandable.

I individually contributed to the following sections of the `README.md`, created the diagrams of that sections and contributed to the slides:

- Problem statement
- Network architecture
- TOR protocol