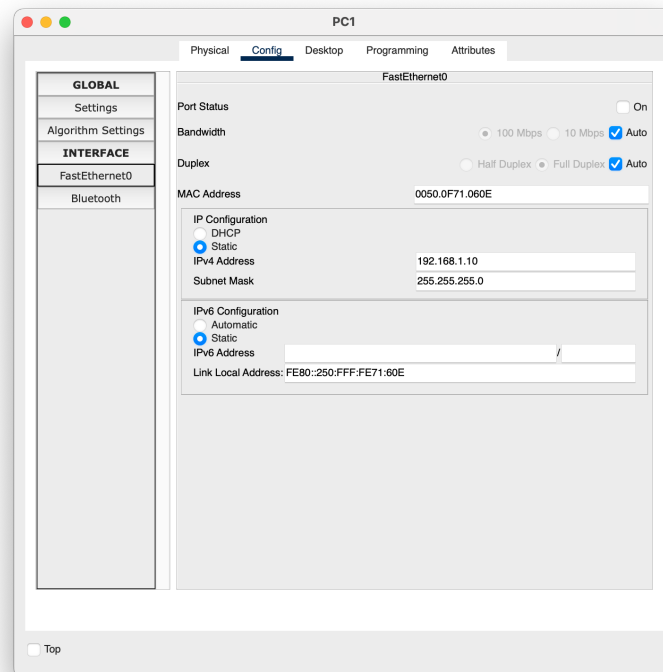# L1 - PC Network Adapter Off Explanation

During my internship at Halkbank, I attempted to connect my company-provided laptop to the corporate network using a standard Ethernet cable. However, I couldn't access the internet or even reach internal services.
I reported the issue to the IT department. They confirmed that:
- The Ethernet cable was functional.
- The switch port was up and forwarding.
- The physical link LED on the switch was active.

Despite all this, the PC couldn't communicate with the network.

Upon checking the device itself, it was observed that the network adapter was disabled in the operating system. Even if the physical layer components were working perfectly (cable, NIC, switch port), the OS was not using the interface.
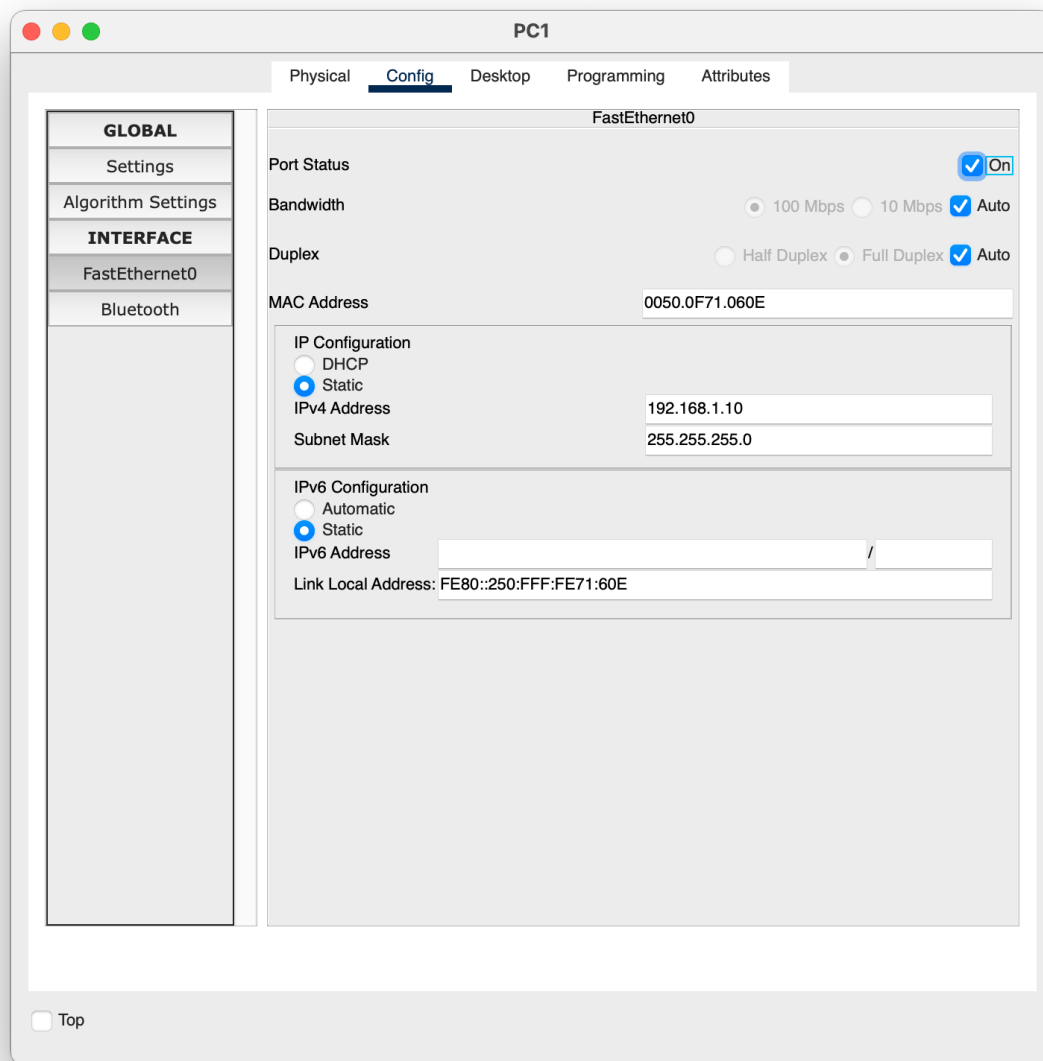

The problem was resolved by:
Navigating to
Control Panel → Network and Sharing Center → Change Adapter Settings
→ Right-clicking the network interface
→ Selecting "Enable"

As soon as the interface was re-enabled, the Ethernet hardware was able to start functioning and the computer successfully connected to the network.

This issue belongs to OSI Layer 1 – Physical Layer because the failure was caused by the lack of a hardware-level signal path despite physically connected devices. Until the NIC was enabled, no bits could be transmitted or received.