

Building Network Devices as a Networking Class Homework Infrastructure

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Undergraduate networking courses aim to teach students how the Internet works. While existing approaches cover everything from using the sockets API to configuring networks, there is less focus on the devices that constitute the Internet infrastructure.

In this work, we introduce a homework infrastructure developed at University Politehnica of Bucharest to teach students key protocols within the TCP/IP stack through implementing their own network devices. We document the essential design decisions and make the platform publicly available.

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