

Set up port forwarding to access the Jupyter notebook from your local machine. Explain what port forwarding is, what every part of the command does, and how it works.

Port forwarding securely forwards traffic from a local port to a remote server, allowing access to services like Jupyter as if they were running locally.

The command **ssh -i /Users/annice_me/Desktop/AWS/fall_qtm350.pem -L 8888:localhost:8888 ubuntu@3.21.76.90**, uses -i to specify the private key for authentication, -L 8888:localhost:8888 to bind local port 8888 to the remote Jupyter server on port 8888, and connects as user ubuntu to the EC2 instance. When visit <http://localhost:8888> in the browser, the request is encrypted, sent through the SSH tunnel to the EC2 instance, and forwarded to Jupyter (enabling private access without exposing the port to the internet).