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Cyber Security and LLMs

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Cyber Security

Trying to protect computers, networks, and data from unauthorized access, theft, or damage.

How can LLMs help us defend?

Image generated by DALL-E

Strato CyberLab

- To have good defense we need people
- Can LLMs help us get better in Cyber Security?
- Perhaps the hardest part is to start learning
  - How? Where?

- Let’s take a look at Strato CyberLab!

Demo Time!

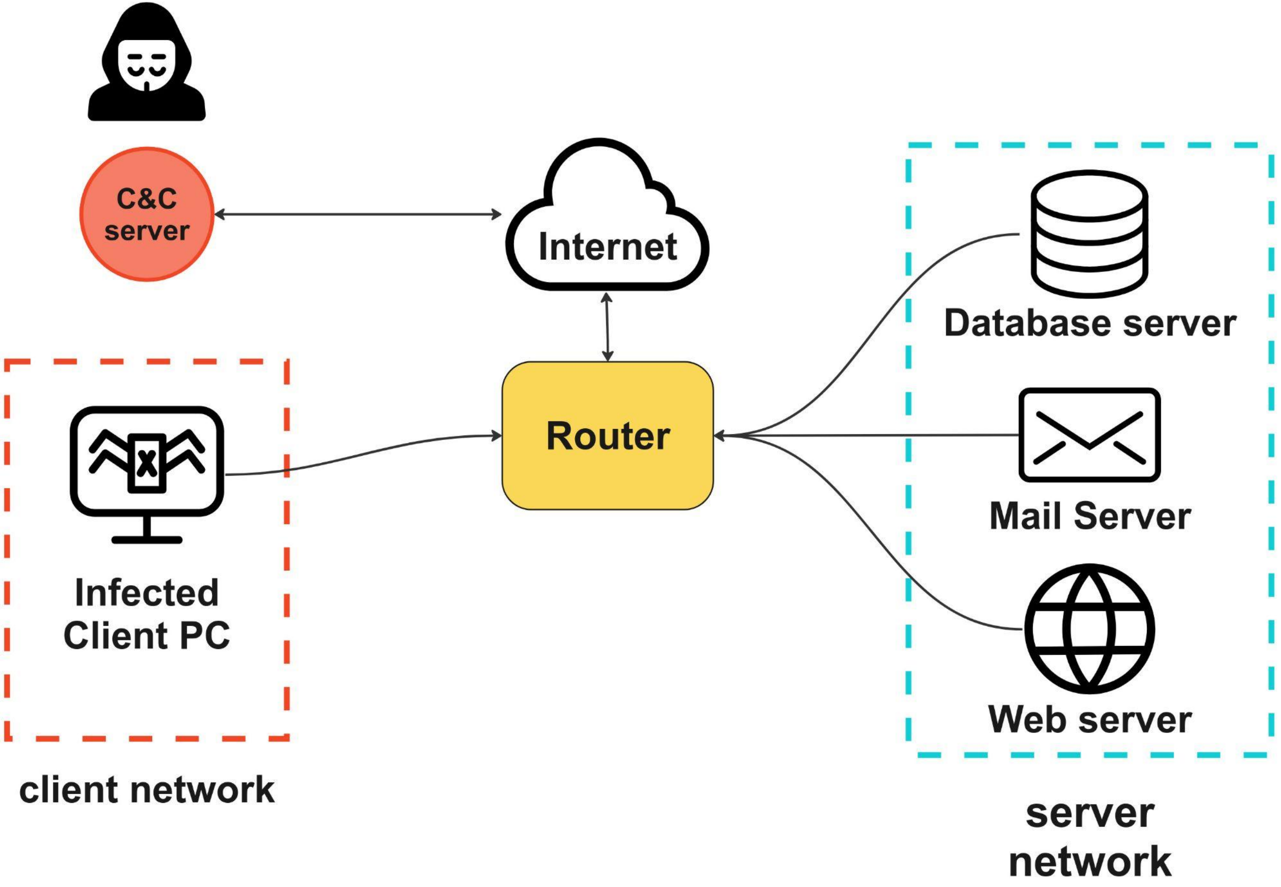
Can LLMs plan and execute network attacks?

Image generated by DALL-E

What are we trying to do?

- Pretend we are hackers
- Find our weak points
- Improve our defense

The NetSecGame Environment



What can the attacker do? (Actions)

- **Scan Networks** to find computers
- **Scan Services** to find what the computers are doing
- **Exploit Services** to gain access
- **Find Data** once they control a new computer
- **Exfiltrate Data** to their Command and Control server

Goal of the Scenario

- Find the email server
- Gain access to it
- Find and exfiltrate the administrator’s emails

Demo Time!

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Thank you!