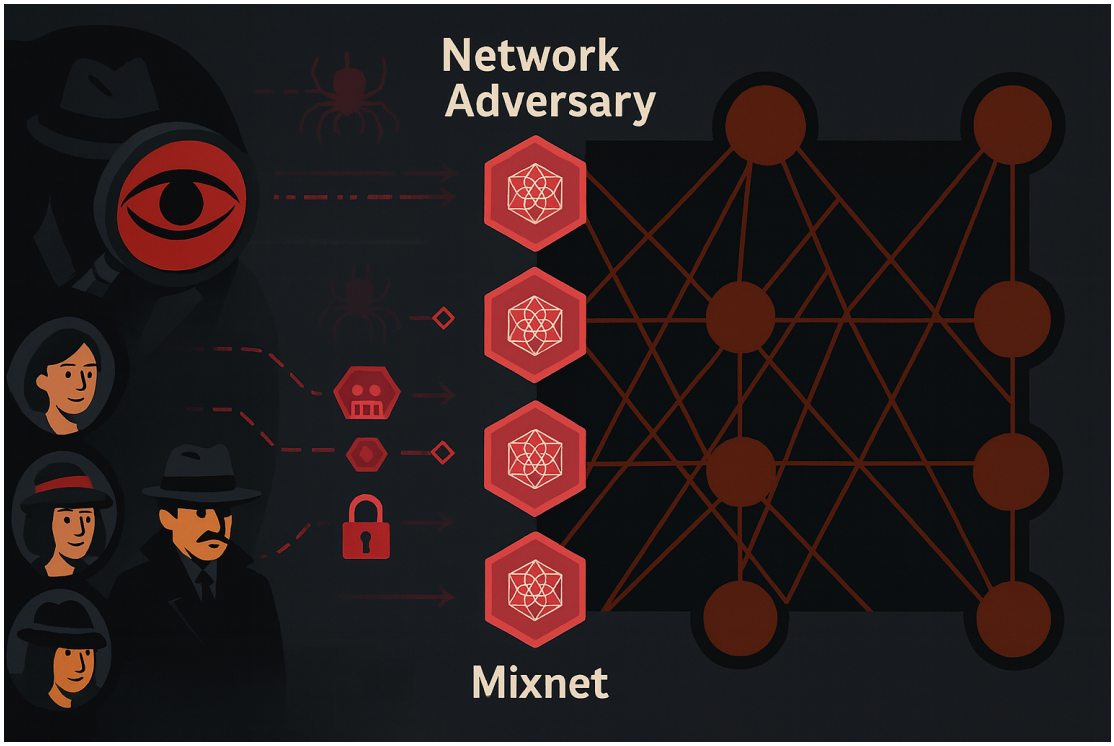
Enhancing the Usability of Mixnets



Mixnets are overlay networks on the internet that provide users with online privacy by obfuscating the traceability of their communication patterns. Owing to these privacy guarantees, mixnets have recently seen practical adoption, such as in the Nym mixnet (`https://nym.com/`). That said, since mixnets introduce high communication latency, their adoption in latency-sensitive applications such as web browsing remains challenging.

In this master's thesis, we aim to provide practical solutions to improve the usability of mixnets in latency-sensitive scenarios. Specifically, the student will begin by conducting a brief review of the state-of-the-art research in this area, followed by the implementation of enhanced versions of selected approaches. The student is expected to have a solid background in object-oriented programming in Python, along with basic familiarity with mixnets. (If you understand more than 60% of the content in the paper at `https://www.ndss-symposium.org/wp-content/uploads/2024-221-paper.pdf`, you are a very good fit for the project.)

Practicalities

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Nature of the work:	20% literature, 20% theoretical work, 60% software
Number of students:	1

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