

Darknet Traffic Analysis Investigating the Impact of Modified Tor Traffic on Onion Service Traffic Classification

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Abstract: *The project centers on analyzing network traffic within darknet environments, such as the Tor network, to understand how modifications to Tor traffic impact the classification of Onion Service traffic. It acknowledges that while Tor and Onion Services are designed for privacy and anonymity, they can be misused, emphasizing the need for better understanding and monitoring. The project has three primary goals: identifying Onion Service traffic within Tor traffic, assessing the effects of traffic modifications, and pinpointing influential features in the classification process. The project likely employs machine learning and data analysis techniques to achieve its objectives, with a particular focus on analyzing network traffic patterns within the Tor network. The project's findings may have implications for privacy, security, and network monitoring, highlighting the delicate balance between maintaining user privacy and ensuring network security.*

Keywords: Traffic classification, machine learning, onion services, tor, anonymity, feature selection