Abschlussvortrag Research Track Sepideh Sayadkouh

"Context-driven Secret Detection in Source Code"

Numerous tools have been developed to scan source codes for detecting potential secrets and credentials. However, they often suffer from a high rate of false positives. We have developed DeepSecret, a novel deep learning model that precisely identifies various types of secrets within source code. Unlike previous techniques that look for secrets on a single-line basis, DeepSecret incorporates the code surrounding potential secrets. Extensive experiments have proven that this context-based approach outperforms state-of-the-art techniques. DeepSecret has achieved an overall precision of 93% and significantly reduced false positive rates to 7%, on average. Notably, DeepSecret has also revealed a promising performance for detecting unseen secrets. We have made DeepSecret, along with its implementation, our extensive secret dataset, and detailed experimental findings publicly available.

Betreuer der Arbeit: Prof. Dr. Mohammad Ghafari, DR Dr. Christoph Knieke

Datum: Freitag, 19. April 2024, 12:00 Uhr

Ort: Online-Meeting über BBB

Link: https://webconf.tu-clausthal.de/rooms/sep-kyz-q5v-eyw/join