

Deep Learning for Secure Mobile Edge Computing in Cyber-Physical Transportation Systems

Mobile Edge Computing (MEC) can be used to execute computing-intensive applications on the edge of transportation networks directly. As a result, the communications traffic is substantially increased among the connected edge devices. Therewith, communications security is emerging as a serious problem, and as an important research issue of communications security, active feature learning is studied in this article for actively detecting unknown attacks. A model based on deep learning is designed to learn attack features. This model uses unsupervised learning to accomplish the active learning process. In the evaluation, 4 datasets are used to conduct experiments. A comparison of the proposed model with four other machine learning-based algorithms is going to be done.