1 指纹

题目：

Fingerprint Construction for Network Devices Considering Static and Dynamic Characteristics

考虑静态及动态特征的网络设备指纹构建技术

A Hash Code for Network Devices: Considering Multi-dimensional Features to Identify Intruders

一种网络设备哈希编码：考虑多维度特征以识别入侵者

A Simhash Code for Network Device Fingerprint Structure with Efficient Retrieval

一种高效检索的网络设备指纹结构Simhash码

参考文献题目：

1. IoT Device Fingerprinting: Machine Learning based Encrypted Traffic Analysis

   物联网设备指纹：基于机器学习的加密流量分析
2. Behavioral Fingerprinting of IoT Devices

   物联网设备的行为指纹识别
3. Application of a Neural Network to Generate the Hash Code for a Device Fingerprint

   神经网络在设备指纹哈希码生成中的应用
4. Towards automatic fingerprinting of IoT devices in the cyberspace

   网络空间物联网设备的自动指纹识别
5. Passive Encrypted IoT Device Fingerprinting with Persistent Homology

   具有持久同源性的无源加密物联网设备指纹
6. GTID: A Technique for Physical Device and Device Type Fingerprinting

   GTID：一种物理设备和设备类型指纹技术
7. Smartphone Identification via Passive Traffic Fingerprinting: A Sequence-to-Sequence Learning Approach

   基于被动流量指纹的智能手机识别：一种序列到序列学习方法
8. Application Research of File Fingerprint Identification Detection Based on a Network Security Protection System

   基于网络安全防护系统的文件指纹识别检测应用研究
9. Network Forensic Investigation Protocol to Identify True Origin of Cyber Crime

   识别网络犯罪真实来源的网络取证调查协议

2 多尺度

题目：

Dynamic Scale Detection Strategy for Network Target Based on Deep Reinforcement Learning

一种基于深度强化学习的网络目标动态尺度探测策略

参考文献题目：

1. Multi-scale detection and interpretation of spatio-temporal anomalies of human activities represented by time-series

   时间序列代表的人类活动时空异常的多尺度检测和解释

2. Scale-aware hierarchical loss: A multipath RPN for multi-scale pedestrian detection

   尺度感知分层丢失：用于多尺度行人检测的多路径RPN

3. Infrared Dim Target Detection Based on Multi-scale Space and Multi-directional Gradient Search

   基于多尺度空间和多方向梯度搜索的红外弱小目标检测

4. An Invariant Multi-Scale Saliency Detection for 3D Mesh

   一种不变的三维网格多尺度显著性检测方法

5. Cascade multi-scale object detection on high-resolution images

   高分辨率图像的级联多尺度目标检测

6. Multi-Scale Ships Detection in High-Resolution Remote Sensing Image Via Saliency-Based Region Convolutional Neural Network

   基于显著性的区域卷积神经网络在高分辨率遥感图像中的多尺度舰船检测

3 声音定位

题目：

Device Position Identification Based on Microphone Array

基于麦克风阵列的设备定位识别

Design of Microphone Array for 3D Device Location Scene

面向设备三维定位场景的麦克风阵列设计

参考文献题目：

1. Sound positioning using a small-scale linear microphone array

   使用小型线性麦克风阵列进行声音定位

2. Analysis and Evaluation of Sound-based Positioning Techniques for Short Distances

   短距离声基定位技术的分析与评价

3. Drone Positioning System Based on Sound Signals Detection for Tracking and Photography

   基于声信号检测的无人机跟踪摄影定位系统

4. Robot Position Identification by Actively Localizing Sound Beacons

   主动定位声标的机器人位置识别

5. A Fast Sound Ray Tracking Method for Ultra-short Baseline Positioning

   一种用于超短基线定位的快速声线跟踪方法

6. Joint Identification and Localization of a Speaker in Adverse Conditions Using a Microphone Array

   使用麦克风阵列对不利条件下的说话人进行联合识别和定位

7. Talker localization based on the combination of DOA estimation and statistical sound source identification with microphone array

基于DOA估计和统计声源识别与麦克风阵列相结合的说话人定位

8. Robot Position Identification by Actively Localizing Sound Beacons

   主动定位声标的机器人位置识别

9. Research on Noise Source Location of 110KV Outdoor Substation Based on Acoustic Array

   基于声阵列的110KV户外变电站噪声源定位研究

10. Microphone Array Based Localization of Sound Source

    基于麦克风阵列的声源定位

11. Position fingerprint localization method based on linear interpolation in robot auditory system

    机器人听觉系统中基于线性插值的位置指纹定位方法

12. Multiple Sound Source Position Estimation by Drone Audition Based on Data Association Between Sound Source Localization and Identification

    基于声源定位与识别数据关联的无人机听觉多声源位置估计

4 弱特征

Weak Feature Extraction Technology for Device Recognition in Heterogeneous Networks

用于在异构网络中进行设备识别的弱特征提取技术