

EDINBURGH NAPIER UNIVERSITY

SCHOOL OF COMPUTING

PROJECT DIARY

Student: Andrew Rocke

Supervisor: Petros Karadimas

Date: 16/11/2024

Last diary date: 08/10/2024

Objectives:

Initial Report – consists of above 2000 word literature review, that consists of 3 paragraphs: ICS, IDS & ML. Gantt Chart

Progress:

Researched the Machine Learning topic, lots of good papers on machine learning. Found the excellent paper identifying pitfalls

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@inproceedings{arp2022and,  
  title={Dos and don'ts of machine learning in computer security},  
  author={Arp, Daniel and Quiring, Erwin and Pendlebury, Feargus and Warnecke, Alexander and Pierazzi, Fabio and Wressnegger, Christian and Cavallaro, Lorenzo and Rieck, Konrad},  
  booktitle={31st USENIX Security Symposium (USENIX Security 22)},  
  pages={3971--3988},  
  year={2022}  
}
```

Identified Random Forests for Binary Classification and decided to base experiment on this

Manages to run Snort on a PCAP using community Rules

Supervisor's Comments: