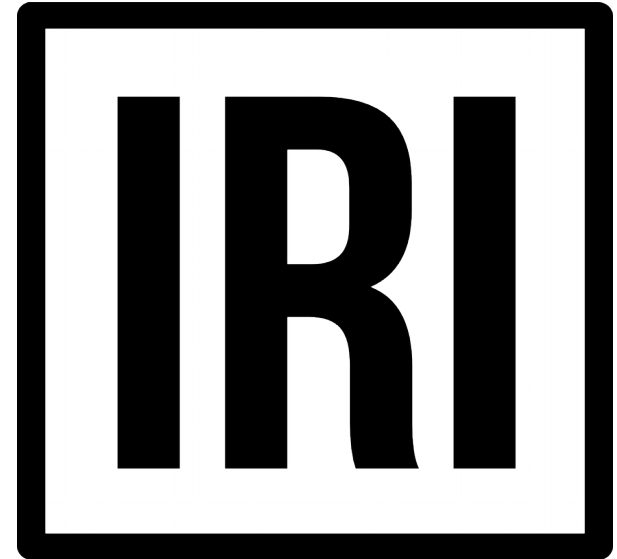# Arhuaco: Grid Security Monitoring
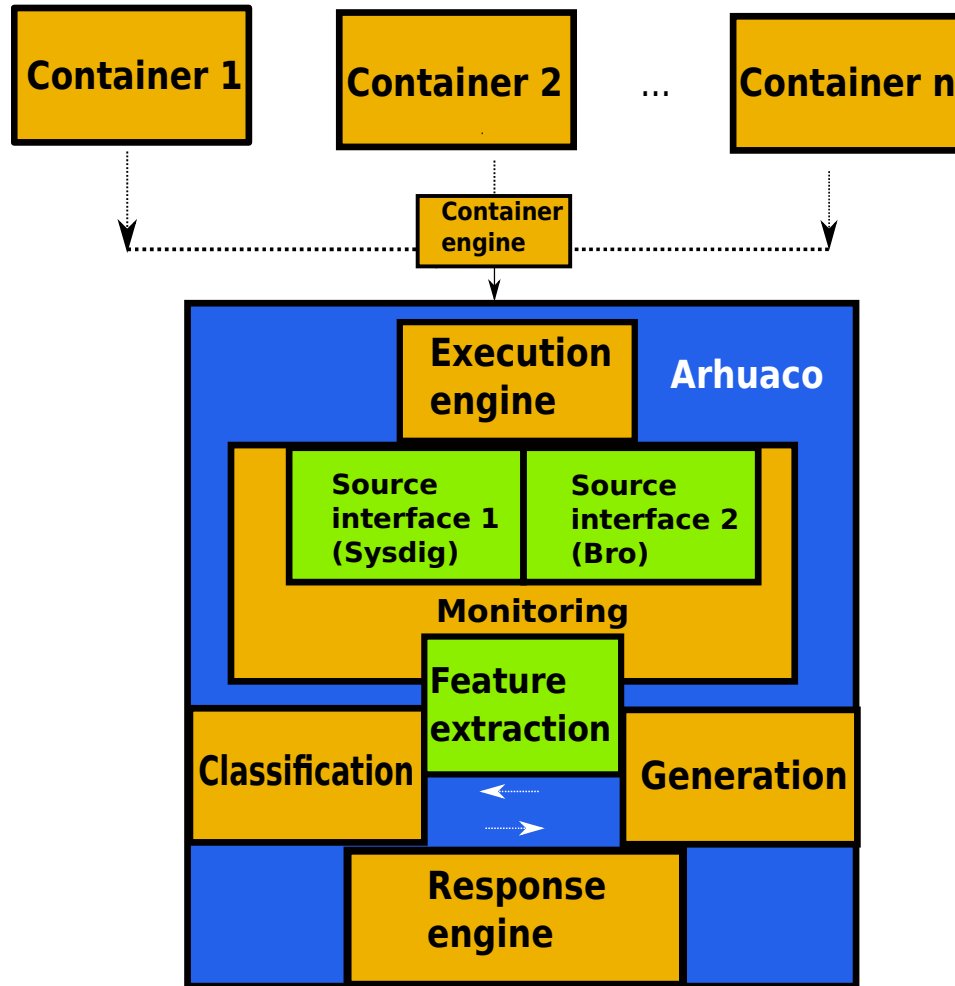
Andrés Gómez Ramírez
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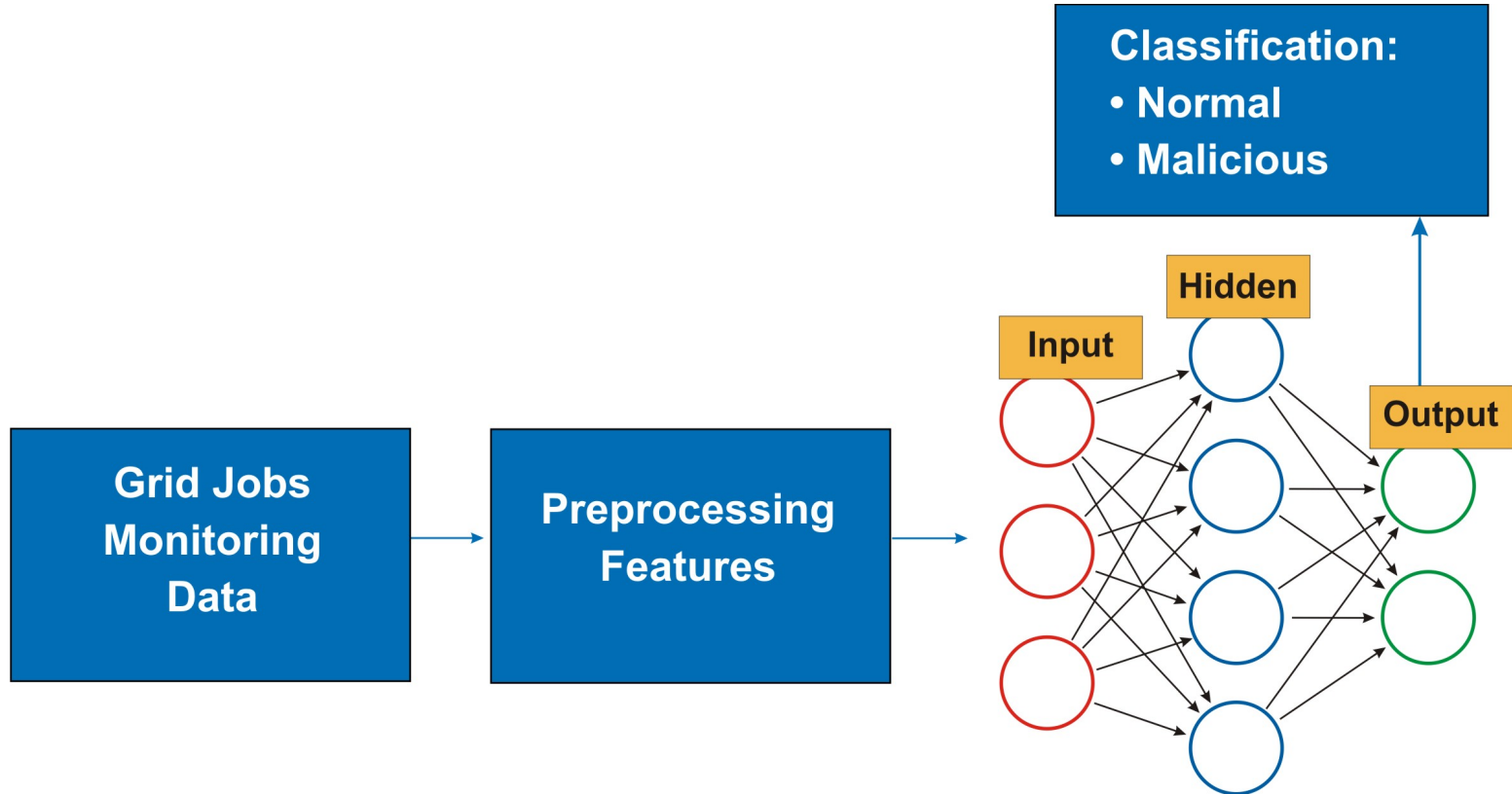**andres.gomez@cern.ch**

Deep learning and Security by Isolation
For Intrusion Detection and Prevention

Andrés Gómez – **Frankfurt University**

Deep learning and Security by Isolation
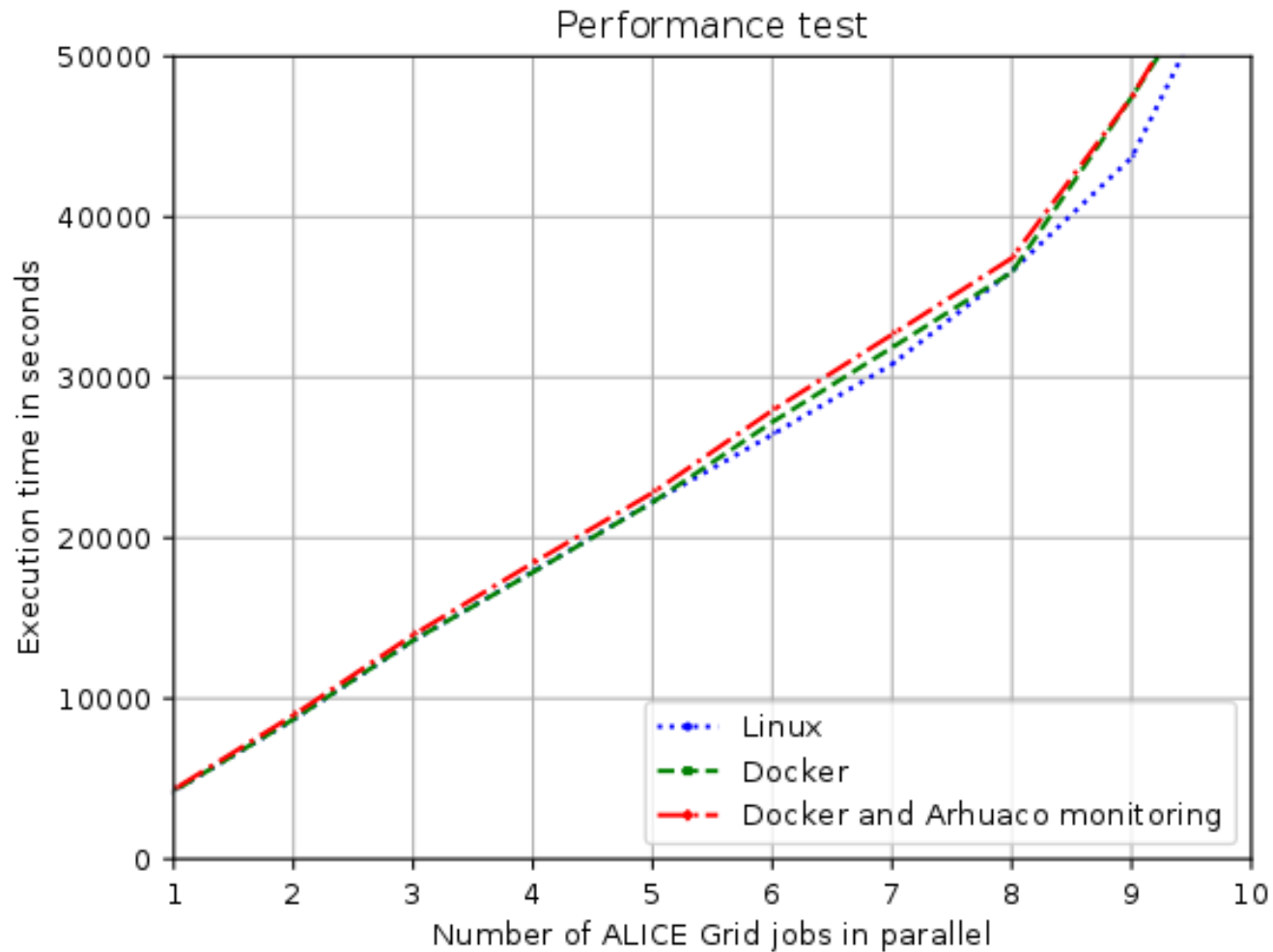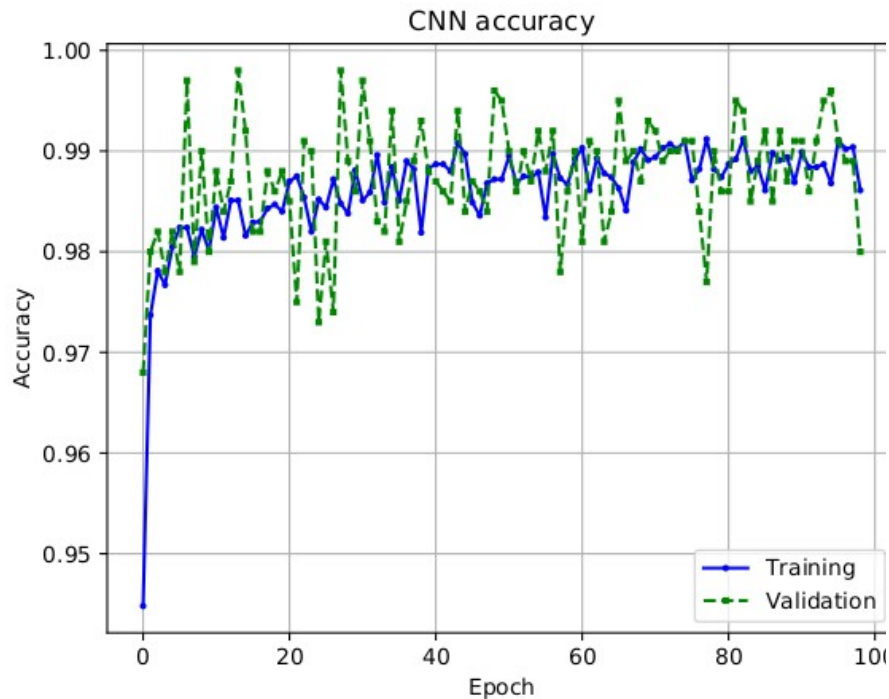## For Intrusion Detection and Prevention

ALICE Grid Security Monitoring

- Linux Containers
- Deep Learning
- Convolutional Neural Networks
- Recurrent Neural Networks - LSTM
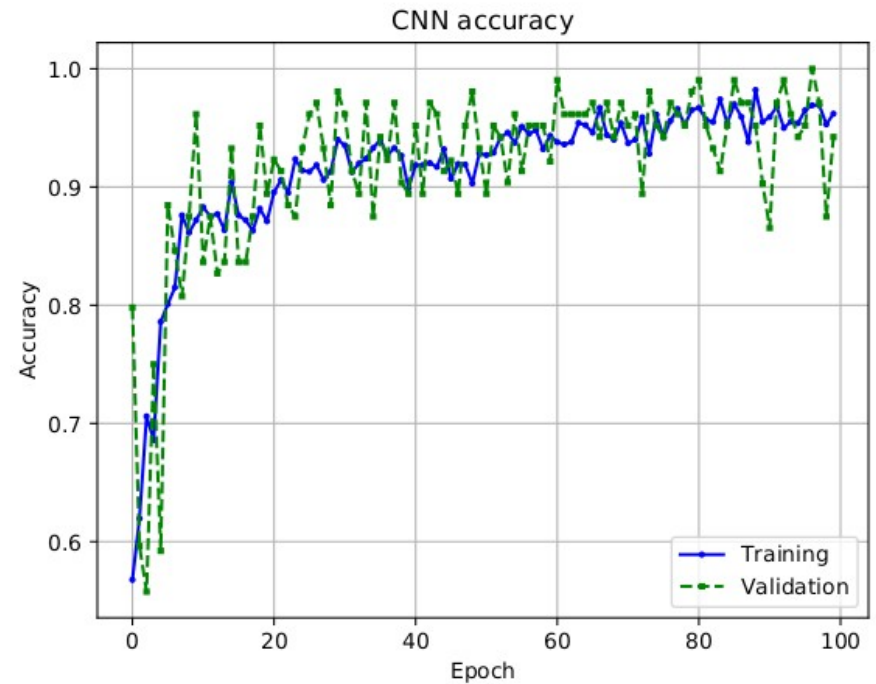 Generative method for improving training
- Grid Jobs – normal vs malware

Performance results

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ALICE Grid jobs – normal vs malware: results

System Calls

Network Connections