



ENCS

# Corporate Overview



- ❑ North American HQs
- ❑ Encrypted Traffic Analytics, Network and Security Monitoring Solutions
- ❑ Expertise: AI/ML for Traffic Analysis, cyber security;



GENERAL DYNAMICS

FIREMON

HITACHI

JUNIPER  
NETWORKS

mycomosi  
The Assurance Cloud Company™



Northwestel  
Bringing us together.

SDN COMMUNICATIONS

TELUS  
health solutions

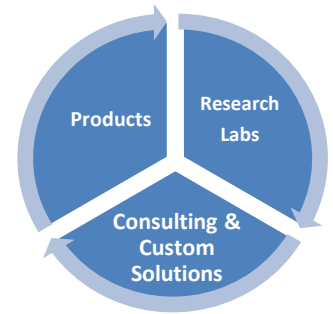
# Team

## Team Background – Cyber Security & Networking

- ❑ Experience at leading vendor companies
- ❑ Many published papers & patents
- ❑ Software, System Architecture, Research

## Current

- ❑ Product development
- ❑ Research & Software Development Experience with Algorithms-Machine Learning
- ❑ Consulting services in cyber security
- ❑ Developing Security Tools
- ❑ Software Development - Back-end & GUI



# Challenges in an Encrypted World

- ❑ 80% of Network Traffic Today is Encrypted ~ Gartner
- ❑ Deep Packet Inspection (DPI) Engines & Traffic Classification lose visibility
- ❑ Impacts cyber security, QoS, network planning & law enforcement
- ❑ New solutions are required to provide visibility into network traffic without decryption while preserving end user privacy
- ❑ Solution should be resilient to changes in the encryption standards and application signaling protocols

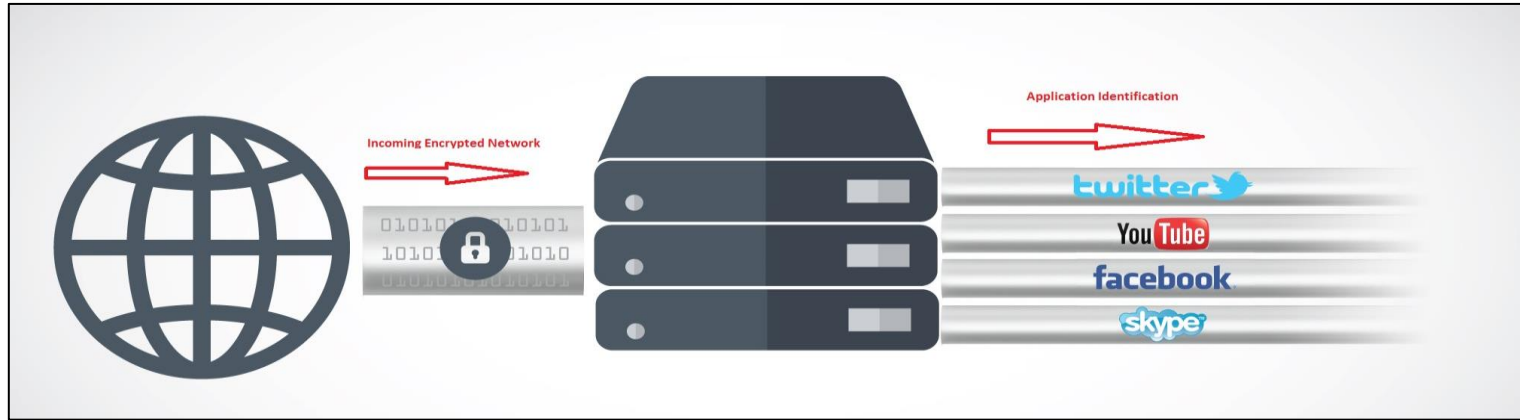
↑ **80%**  
encrypted

**TLS 1.3+**

**QUIC**      **TLS 1.3**  
**TLS 1.2**

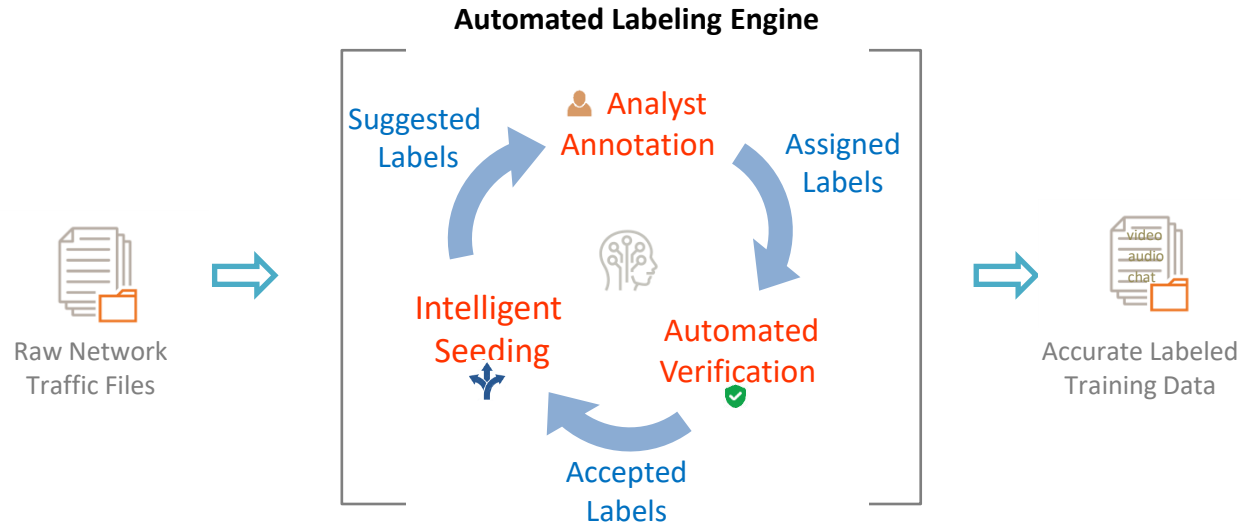
**TLS 1.1**      **SSL**

# Detects Applications within Encrypted Traffic



- **AI-based Network Traffic Visibility**
  - Suitable for integration with big-data platform or network probes
  - High accuracy and low false positives
  - Detects applications within encrypted traffic including:
    - Social Media, Audio/Video streaming, VoIP, P2P, IM, Mail, File Transfer, Web browsing
  - Designed to scale up to 10Gbps traffic rates

# Labeler: Overall Approach



- Off-line tool to label encrypted network traffic
- Labeled data is essential for model creation in a supervised ML based system
- Human in the loop approach