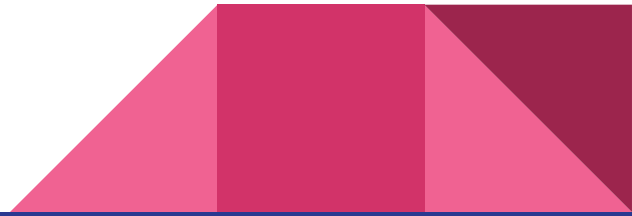
ITAR, 802.11, and Testing

By Afton

Task 1: ITAR Policy

- ITAR = International Traffic in Arms Regulation
  - USML- United States Munitions List
    - Technical Data
- How it applies to Geon
  - Geon produces technical data that is covered by the USML
- Why the policy is needed
  - Educate employees on what ITAR is and how to comply with it



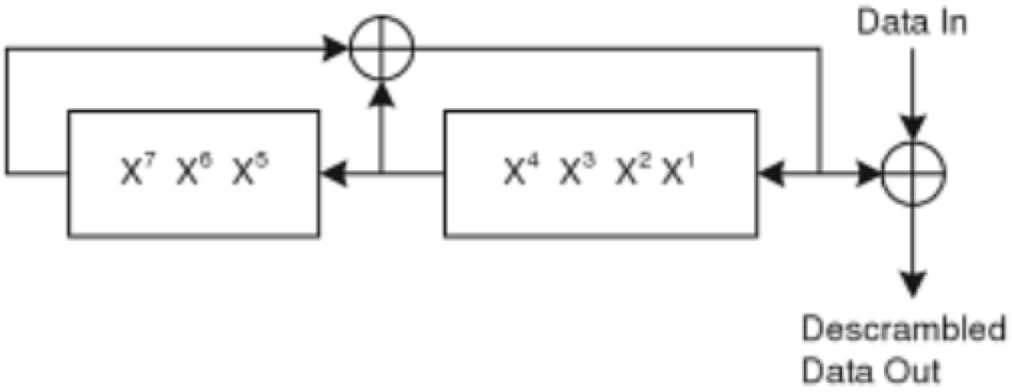
Common Violations of ITAR

1. Failure to register
2. License approval of technical data is needed in advance
3. Incomplete Documentation
4. Other parties
5. Knowing what defense articles ITAR covers

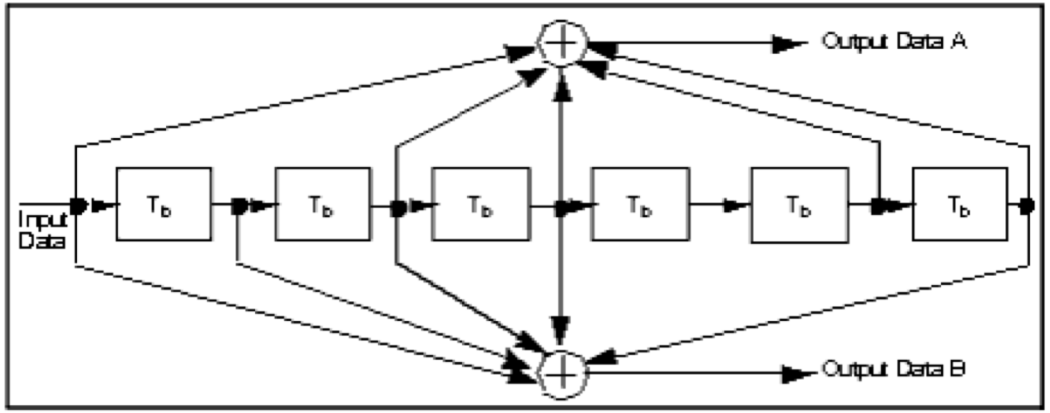
Task 2: 802.11 Specification

- Scramble
- Convolutional encoding
- Puncturing
- Insertion of Dummy Bits
- Viterbi Decoder
- Descramble

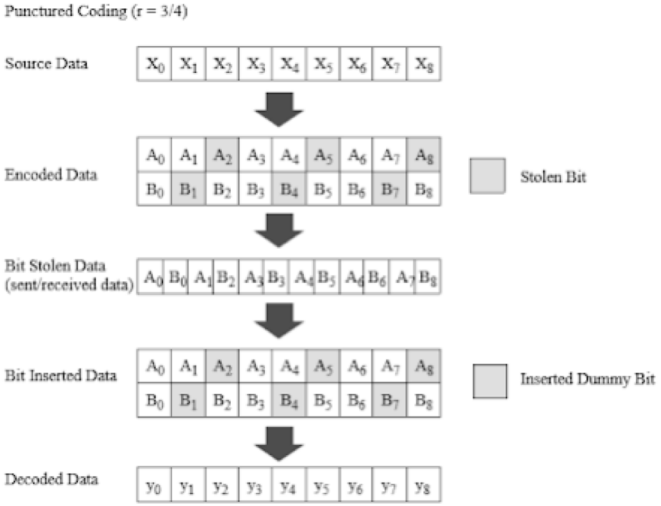
Scramble



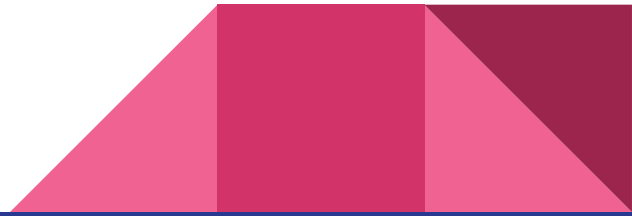
Encode



Puncture

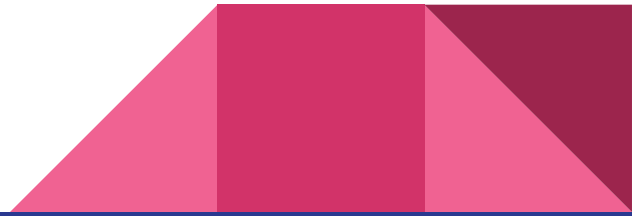

Punctured Coding (r = 3/4)
Source Data
X0 X1 X2 X3 X4 X5 X6 X7 X8
Encoded Data
A0 A1 A2 A3 A4 A5 A6 A7 A8
B0 B1 B2 B3 B4 B5 B6 B7 B8
Stolen Bit
Bit Stolen Data
(sent/received data)
A0 B0 A1 B2 A3 B3 A4 B5 A5 B6 A7 B8
Bit Inserted Data
A0 A1 A2 A3 A4 A5 A6 A7 A8
B0 B1 B2 B3 B4 B5 B6 B7 B8
Inserted Dummy Bit
Decoded Data
y0 y1 y2 y3 y4 y5 y6 y7 y8

Demo of Encoding

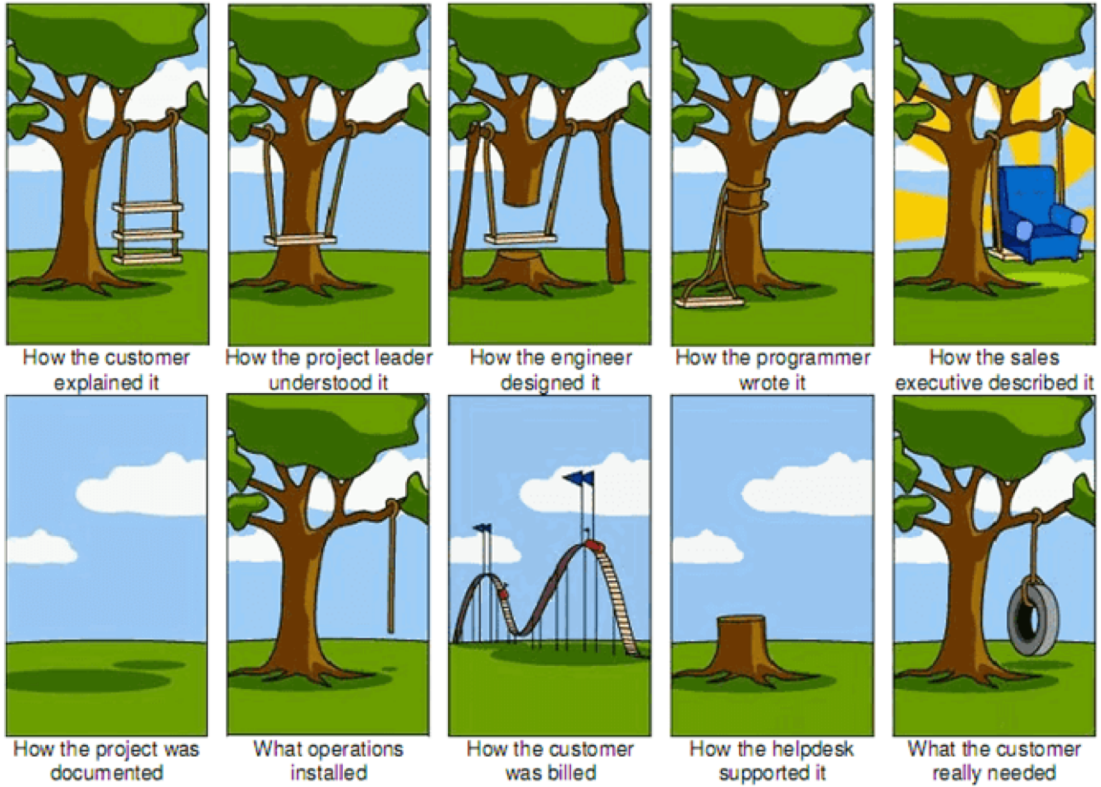


Task 3: Testing

1. DetectionEstimator
2. PSDTrimmer
3. DetectionTracker
4. PSDStitcher



Acceptance Criteria



Testing Completed

1. PSDTrimmer
2. DetectionEstimator