




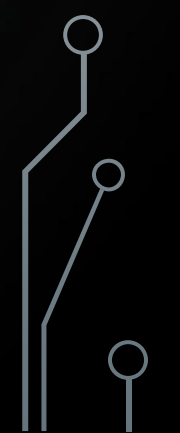
DEPLOYMENT OF THE REGVD MODEL

TEAM 8

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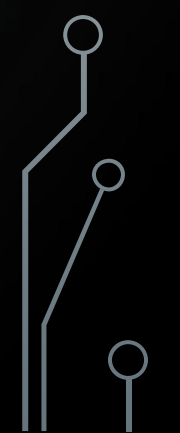


IN WHAT CONTEXT CAN YOU APPLY THE MODEL?

- Cybersecurity
 - Vulnerability of coding functions
 - Context used in the paper
 - Text classification
 - Any ideas?
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IN WHAT CONTEXT CAN YOU APPLY THE MODEL?

- Cybersecurity
 - Vulnerability of coding functions
 - Context used in the paper
 - Text classification
 - Quality detection of code (efficiency)
 - Email classification
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USING THE REGVD

- We have seen how to train the model
- Use listed packages
- Adapt scipy import if using newer version of scipy

```
from scipy.sparse.linalg import eigsh
```

- Possible to run on GPU if available

Environment requirements:

Python


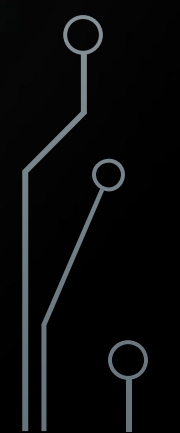
Pytorch

Transformers

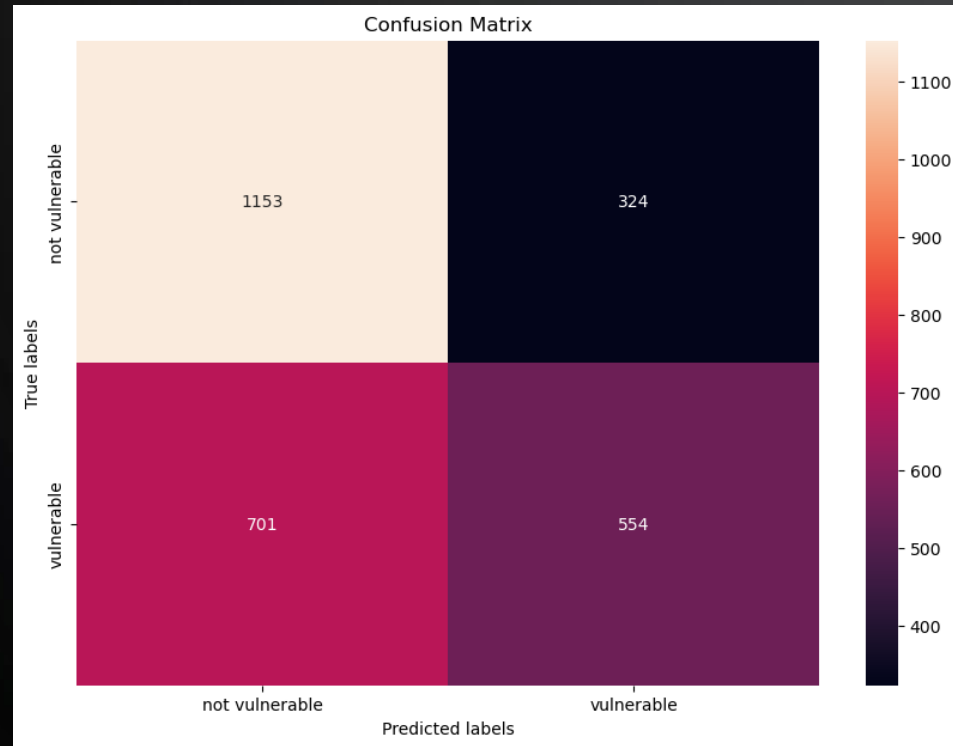
Scipy



BE CAREFUL USING THE ORIGINAL DOCUMENTATION

- Misspelled transformers package
 - Scipy dependency is not listed
 - Mentioned package versions can cause errors
 - Run command is written for MacOS and Linux devices
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SHOULD YOU USE THE MODEL?



- We are not convinced about the performance of this model
- Recall=44%
- Specificity=78%

(RE-)TRAINING THE MODEL

- Performance on CodeXGLUE is not very good
- Put more importance on vulnerability class
- When in use give feedback to expand dataset
 - Re-train when enough data available
 - Re-train when too many noted errors