CVE-2022-35988

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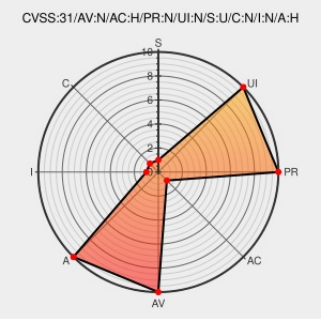
CVE-2022-35988 - advisory for GHSA-9vqj-64pv-w55c

Source: Mitre | Source: NIST | CVE.ORG | Print: PDF



Certain versions of Tensorflow from Google contain the following vulnerability:

TensorFlow is an open source platform for machine learning. When `tf.linalg.matrix_rank` receives an empty input `a`, the GPU kernel gives a `CHECK` fail that can be used to trigger a denial of service attack. We have patched the issue in GitHub commit c55b476aa0e0bd4ee99d0f3ad18d9d706cd1260a. The fix will be included in TensorFlow 2.10.0. We will also cherrypick this commit on TensorFlow 2.9.1, TensorFlow 2.8.1, and TensorFlow 2.7.2, as these are also affected and still in supported range. There are no known workarounds for this issue.

CVE-2022-35988 has been assigned by security-advisories@github.com to track the vulnerability - currently rated as HIGH severity.

Affected Vendor/Software: **tensorflow** - **tensorflow** version **< 2.7.2**

Affected Vendor/Software: **tensorflow** - **tensorflow** version **>= 2.8.0, < 2.8.1**

Affected Vendor/Software: **tensorflow** - **tensorflow** version **>= 2.9.0, < 2.9.1**

CVSS3 Score: 7.5 - HIGH

Attack Vector	Attack Complexity	Privileges Required	User Interaction
NETWORK	LOW	NONE	NONE
Scope	**Confidentiality Impact**	**Integrity Impact**	**Availability Impact**
UNCHANGED	NONE	NONE	HIGH

CVE References

Description	Tags	Link
Fix empty batch issue in svd. · tensorflow/tensorflow@c55b476 · GitHub	github.com text/html	MISC github.com/tensorflow/tensorflow/commit/c55b476aa0e0bd4ee99d0f3ad18d9d706cd1260a

`CHECK` fail in `tf.linalg.matrix_rank` · Advisory · tensorflow/tensorflow · GitHub	github.com text/html	CONFIRM github.com/tensorflow/tensorflow/security/advisories/GHSA-9vqj-64pv-w55c

There are currently no QIDs associated with this CVE

Known Affected Configurations (CPE V2.3)

Type	Vendor	Product	Version	Update	Edition	Language
Application	Google	Tensorflow	All	All	All	All
Application	Google	Tensorflow	2.10	rc0	All	All
Application	Google	Tensorflow	2.10	rc1	All	All
Application	Google	Tensorflow	2.10	rc2	All	All
Application	Google	Tensorflow	2.10	rc3	All	All

cpe:2.3:a:google:tensorflow:*:*:*:*:*:*:*:*:

cpe:2.3:a:google:tensorflow:2.10:rc0:*:*:*:*:*:*:

cpe:2.3:a:google:tensorflow:2.10:rc1:*:*:*:*:*:*:

cpe:2.3:a:google:tensorflow:2.10:rc2:*:*:*:*:*:*:

cpe:2.3:a:google:tensorflow:2.10:rc3:*:*:*:*:*:*:

No vendor comments have been submitted for this CVE

Social Mentions

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