



# AI for the Detection of Child Sexual Abuse Materials in Germany

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# I. CSAM as a quantitative and qualitative problem

# Investigation of CSAM cases

- Requirement of fast analysis of data during the investigation
- Quantitative problem (over 1000 TB of data)
- Psychological problem
- Qualitative problem
- ⇒ ~~rule-based systems (hash databases etc.)~~
- ⇒ machine learning (»neuronal net«) for speedy detection of potential CSAM images

## II. § 184b StGB

# 1. A far-reaching provision on CSAM: § 184b (3) StGB

»(3) Whoever [...] possesses [child pornographic content] incurs a penalty of imprisonment for a term of between one year and five years.«

⇒ Whoever has data at their disposal which contains CSAM, »possesses« such content.

## 2. Limitation in § 184b (5) StGB

»(5) [...] subsection (3) do not apply to acts which exclusively serve the performance of [1.] state functions«

### 3. Transformation in non-CSAM

Data is covered by § 184b StGB as long as CSAM can be extracted from it, including by special knowledge or abilities of the possessor of the data.

# 4. A hybrid AI



# 5. Evaluation

- > 95% of CSAM detected
- < 10% false-positive results
- *Recall* > *Precision* > 90%

# III. Analysis

Constitutional duty to determine the material truth  
(BVerfGE 133, 168)

false-positive results ⇒ filtering by humans

false-negative results

many true-positive results: ⇒ acceptable

sole CSAM image: ⇒ acceptable within limits

aversion of dangers? ⇒ acceptable within limits

systemic errors (*bias*) as main problem



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