

# Detecting cheaters and plagiarism in online exams- techniques and data

## Julius-Maximilians-UNIVERSITÄT WÜRZBURG

### Rainer Scheuchenpflug Alexander Hörnlein

#### **INTRO**

We developed techniques to detect cheating and plagiarism in online exams. And did not find many cheaters.

#### **METHODS**

Logfile analysis of text answers (edits per second) identifies copy-pasting text from the internet/other users. Further edits to disguise the plagiarism are made transparent.

Individualized data sets in statistics exams lead to individualized correct solutions. Identical solutions are an indicator of cheating.

#### **RESULTS**

Logfile analysis was available for 8 exams in WS20; singular suspicious activities were detected in 6 exams, but ignored by 5 instructors/exams. In SS21 and WS21 no potential user requested the analysis. Individualized data and comparison of error patterns identified (4+4+2) + (3) + (2+2) + (2) = 19 cheaters in 10 statistics exams with 1924 participants.

#### DISCUSSION

The methods can only detect specific cheating behavior / work only for a subclass of tasks/questions. Even if available, most instructors do not use the methods and prefer to ignore the problem. Cheating rates cannot be compared to traditional exams due to missing data.

But still: There is no evidence of massive cheating in online exams.

# Students rarely cheat in online exams

and instructors seem to count on that

less than 1% cheaters in online-exams

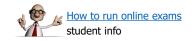


honest cheaters

casetrain@uni-wuerzburg.de

https://go.uniwue.de/mvwji

## Messy section



Logfile: normal typing

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Individual data and error patterns



Post facto: What happens to cheaters?

Online-exam: Breakoutroom



lecture-hall-exams

@CaseTrain



More or less cheating possible?