

mic

CSAW 2021 CTF

GoProSlowYo

mic

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My Epson InkJet printer is mysteriously printing blank pages. Is it trying to tell me something?

 scan.pdf

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Writeup by: GoProSlowYo

Team: OnlyFeet

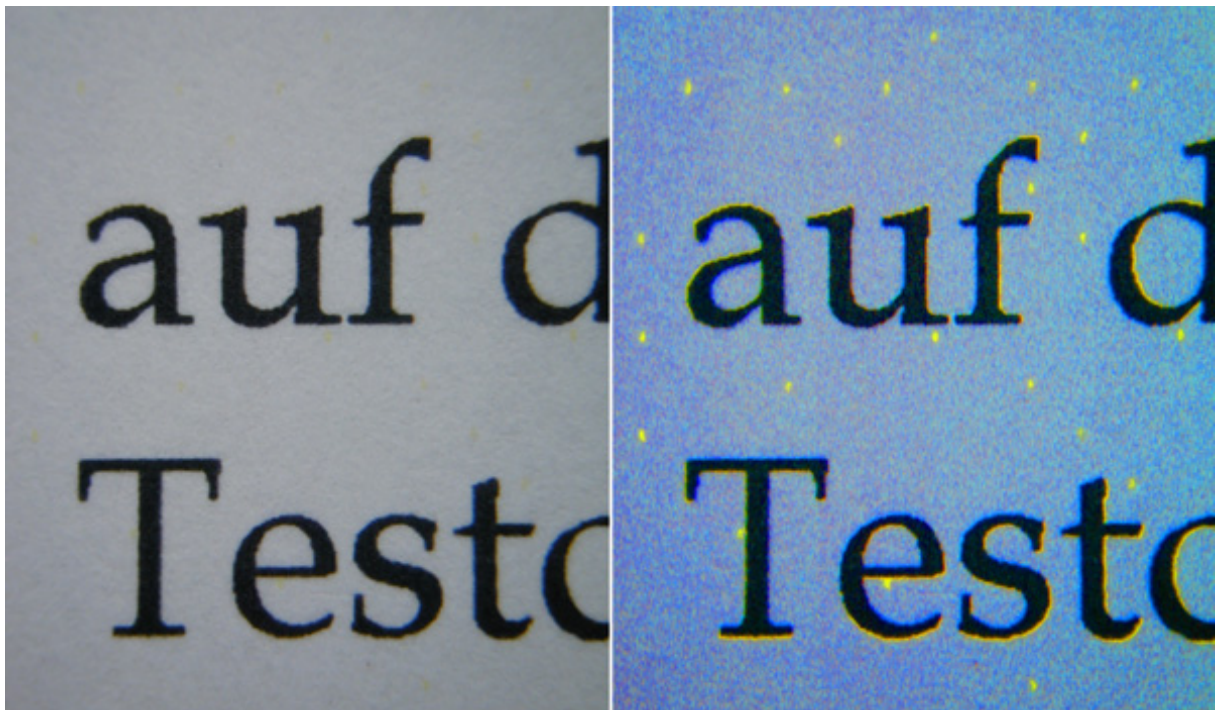
Writeup URL: GitHub

```
1 My Epson InkJet printer is mysteriously printing blank pages. Is it
   trying to tell me something?
```

Initial Research

The text seems to reference the printer “telling” us something. This ‘something’ is MIC’s in the printer page.

Tiny dots are embedded on printouts by modern printers. Markings like these were used to trace NSA documents leaked to The Intercept by Reality Winner.



(source: https://upload.wikimedia.org/wikipedia/commons/8/8e/HP_Color_Laserjet_3700_schutz_g.jpg)

Getting the Flag from the Printed Pages

First we need to quickly install some dependencies:

```
1 git clone https://github.com/dfd-tud/deda
2 pushd deda && pip3 install --user deda && popd
3 sudo apt install poppler-utils
```

Then, we wrote a quick one liner to dump the flag:

```
1 $ pdftoppm scan.pdf scan -png; for x in {01..34}; do echo -n $(python3
  -c "print(chr($(deda_parse_print scan-$$x.png | grep serial | cut -d
    '-' -f2 | sed 's/^0*//'))"); done
2 flag{watchoutforthe poisonedcoffee}
```



Victory

Submit the flag and claim the points:

flag{watchoutforthe poisonedcoffee}