

INTRO DUCTION

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MORE

Student Cloud &

Cyber security

Internship: Malware analysis @

Capgemini

"MAKING THE WORLD A SAFER DIGITAL PLACE"

GET THE FUTURE YOU WANT

CAPGEMINI

"We are fortunate to work at the heart of today's major transformation, to contribute to development in every industry, and to help simply make our planet a better place. And we do this as we have always done at Capgemini: with passion and energy, and all together.

Aiman Ezzat
Chief Executive Officer (CEO)

UNLOCKING THE VALUE OF TECHNOLOGY

A business and technology transformation partner

WORKING WITH 85%

Of the **200 largest**

public companies

on the Forbes

Global 2000 list

1.9 MILLION

Have obtained an advantage with

digital inclusivity initiatives

since 2018

10 YEAR

In succession named

as one of the most

ethical companies in

the world by the Ethisphere

institute

CAPGEMINI RESEARCH INSTITUTE

#1

Six years in

succession for its

qualitative research by

Global Research

INTERNSHIP OBJECTIVES

Malware analyse with the aim of informing an audience - both with basic and advanced knowledge.

- Malware analysis: analyzing malicious software (malware) using tooling.
 - Static analysis: attempting to analyze malware without triggering the malicious intent.
 - Dynamic analysis: attempt to further analyze malware with activation of the malicious intent.
 - Reverse engineering & debugging: a separate set of cyber skills but not trivial to reveal the true nature of malware.

Purpose: presenting a demo to an audience: basic- and advanced knowledge (2 target audiences).

- Basic knowledge: trying to explain what malware is, how it works, how to protect yourself (awareness) and a short demo of as real an example as possible.
- Advanced knowledge: everything from basic knowledge with a more detailed approach to tools, definitions and general context and explanation.

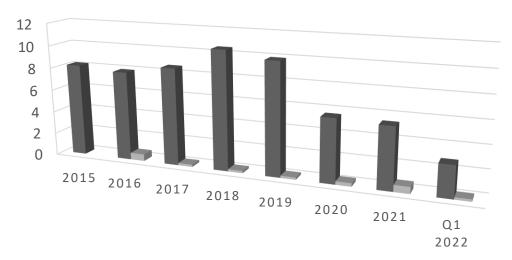
WHY

Why malware analysis is so important? Look at this data on the right.

The **business case** - aka the **why** in this story: malware is, unfortunately, now everywhere. It can be used to target both personal- and professional devices.

Payment does happen less and less. However, *the "worth" does go up*.

YEARLY # MALWARE ATTACKS WORLDWIDE 2015 - Q1 2022 (IN BILLIONS)



	2015	2016	2017	2018	2019	2020	2021	Q1 2022
■ Malware attacks	8.2	7.9	8.6	10.5	9.9	5.6	5.4	2.8
Ransomware		0.6	0.2	0.2	0.2	0.3	0.6	0.2

Statista | malware attack statistieken

	2019	2020	2021	2022
Payment	76%	70%	50%	41%
No payment	24%	30%	50%	59%
Worth	\$174 M	\$765 M	\$766 M	\$457 M

Bleepingcomputer | ransomware betaling statistieken

WHEN PLANNING

First 45 days First 15 days First 30 days First 65 days Week 01 02 03 04 05 06 07 08 09 10 11 12 Presentation **Learn halfway:** MA 2nd sample: Finish: obtain **Documentation:** Introduction: **Documentation:** Learn reverse to internship (PPT): Course chapter engineering: complete feedback Work on Complete deliverable #1 4 completed chapter 5 analysis and regarding documenting documentation company, get

to know demo environment for malware analysis

Malware analyse (MA): ransomware analysis

PPT: continue MA: **Investigate** second sample

PPT 2x: Basic and advanced slide deck

document **PPT:** include second sample

deliverables **Learn:** chapter 6 INE course

Learn: Finalize INE MAP course

Internship deliverable(s): second presentation preparation(s)

Learn: INE MAP course VMs: build virtual machines for malware lab

Timing PPT: Practice first demo run **PPT:** continue working on the slide deck

engineering: Complete chapter 5 PPT: timing, including demos, complete slide deck

Learn reverse

Documentation: Work on

documenting PPT: dry-run and extensive demo testing + complete first presentaiton

COMMUNICATION



WEEKLY REPORT

Containing documentation about daily functioning.

When required: teams,

mail, chat

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WEEKLY REPORT

Containing documentation about daily functioning.

When required: teams,
mail, chat

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FEEDBACK MEETING 1X / WEEK

At least 1x / week a longer feedback session. Check on progression and deliverables expectation(s)

PDF DOCUMENT TEAMS

PDF DOCUMENT TEAMS

MEETING MINUTES
WORD DOCUMENT



Thank you for your time, attention and presence.

Do you have any questions?

FREDERIK CRAUWELS INTERNSHIP 2023 THOMAS MORE CAPGEMINI