

# Advanced Binary Exploitation — Summer 2019

## Advanced Binary Exploitation

Clemens Jonischkeit & Julian Kirsch

Chair of IT Security / I20  
Prof. Dr. Claudia Eckert  
Technische Universität München

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# Time and place

**When?** **Wednesday, 16:00-17:30**

**Where?** **01.08.033**

# Registration

- ▶ Send an e-mail to `{jonischk,kirschju}@sec.in.tum.de` until **2019-02-13, 23:59**. Include the following information:
  - ▶ your matriculation number
  - ▶ the semester in which you graduated from bx1
  - ▶ *optional*: topic suggestions
- ▶ **Additionally**: Registration using the **matching system**
- ▶ **14** slots

# Process

Phase I (10 weeks):

- ▶ “Usual” practical course (weekly meetings and exercise sheets)

Phase II (3 weeks):

- ▶ Final project (short paper and presentation)

# Process — Phase I

- ▶ **Teams of two**
- ▶ Each week: Introduction to a new topic
  - ▶ Submission of solutions until the following week **before** the meeting
  - ▶ Private demonstration and short explanation of solution during the meeting

# Process — Phase II

## Final project

- ▶ Development of a vulnerable application
- ▶ Creation of an exploit (ab)using the vulnerability/ies
- ▶ Short paper
- ▶ Presentation
- ▶ Details follow when the time has come

# Contents

- ▶ Bypassing advanced protection mechanisms
- ▶ Real-world vulnerabilities
- ▶ Exploitation of platforms other than x86(\_64)
- ▶ Exploitation of operating systems other than Linux
- ▶ (your suggestions?)

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- ▶ Exploitation of operating systems other than Linux
- ▶ (your suggestions?)
- ▶ But *most importantly*:



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- ▶ Exploitation of operating systems other than Linux
- ▶ (your suggestions?)
- ▶ But *most importantly*:
- ▶ **Ub3r l33t h4x0r sk1llz w1th hxp**



Questions?

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tl;dr:

Former **bx1** graduates register via e-mail *and* matching system:

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- ▶ *optional*: Topic suggestions