

Introduction

Andrei Pitiş

Operating Systems Practical

October 8, 2014

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

- ▶ Andrei Pitiş (andrei.pitis@cs.pub.ro)
- ▶ Laura Gheorghe (laura.gheorghe@cs.pub.ro)
- ▶ Lucian Mogoşanu (lucian.mogosanu@cs.pub.ro)
- ▶ Invited speakers

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

1. Booting
2. Read-Copy-Update
3. Fast Userspace Mutex
4. Xen and the Art of Virtualization
5. KVM on ARM
6. From L3 to seL4 what have we learnt in 20 years of L4 microkernels?
7. L4Android: A Generic Operating System Framework for Secure Smartphones
8. Energy Management for Hypervisor-Based Virtual Machines
9. MultiPath TCP
10. Exploiting Concurrency Vulnerabilities in System Call Wrappers
11. PSiOS: Privacy and Security in iOS
12. Pointer Tainting
13. Android Permissions Demystified

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

- ▶ 2 labs
- ▶ Learn about research tools and methods
 - ▶ Mendeley
 - ▶ LaTeX
 - ▶ LyX
 - ▶ Inkscape
 - ▶ Dia
 - ▶ R

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

- ▶ Choose a team (2-4 students)
- ▶ Propose a project (systems domain) / choose a project proposal
- ▶ Develop the project and obtain results
- ▶ Present the results
- ▶ Write a paper
- ▶ Submit the paper to a conference/journal
- ▶ Review other papers

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

- ▶ 5 points Lecture & Final Exam + 5.5 points Project
- ▶ Lecture & Final Exam:
 - ▶ 4 points - Final Exam
 - ▶ open book
 - ▶ 11 or 12 tasks (one for each lecture) - only 9 tasks are graded
 - ▶ 1/10 starting grade
 - ▶ 60 minutes
 - ▶ 1 point - Small tests at the end of each lecture
 - ▶ A “positive” rounding may be applied to students active at various lectures

- ▶ Project:
 - ▶ Activity during the semester:
 - ▶ 0.5 points - Project proposal (week 5)
 - ▶ 0.5 points - Assignment (week 6)
 - ▶ 0.5 points - Half semester presentation (week 9)
 - ▶ 1.0 points - Short paper (week 9)
 - ▶ 0.5 points - Final Presentation (week 14)
 - ▶ 1.5 points - Paper
 - ▶ 0.5 points - Peer review of other projects
 - ▶ 0.5 points - Bonus if you submit your paper to a conference/journal

The Team

Lecture

Laboratory

Project

Grading

Resources & Information

`http://ocw.cs.pub.ro/courses/soa`