ESSE – Establishing Security

- Institute of Information Systems Engineering
- Research Group for Industrial Software (INSO)
- Working Group Establishing Security (ESSE)
- Lectures
  - Introduction to Security (WS, Bachelor)
  - Security for Systems Engineering (CTF-Contest) (SS, Bachelor)
  - Advanced Security for Systems Engineering (WS, Master)
  - Selected Topics of Digital Forensics I (SS, Master)
  - IT Security in Large IT Infrastructures (CTF-Contest) (SS, Master)
  - Seminar on Security
Research Topics (Excerpt)

- Electronic Payments
- Large IT Infrastructures
- Secure and Anonymous Communication
- Embedded Security and Internet of Things
- Governance, Risk and Compliance
- eHealth
- Penetration Testing, Security Audits, Security Certification
- Identification, Authentication and Authorization, eID solutions
- IT Security Teaching Methods
- XML Security
Excerpt of Applying Subject Areas

- Malware and Internet Crime
- Physical Security of IT Systems
- Applied Cryptography
- Exploit Development, Offensive Computing, and Exploit Mitigation
- Rootkits and OS Security
- Honeypots, Honeynets, and Honeytokens
- Mobile Security
- Privacy-Protection in Cloud/Mobile Applications
- Security Usability for End-2-End Security
- Security Engineering in the Software Life-Cycle
Contact

- Questions regarding Seminar aus Security
  - https://security.inso.tuwien.ac.at/
  - Tuwel forum
  - lva.security@inso.tuwien.ac.at – please state the lecture name as this e-mail address is used for multiple lectures
  - Please don’t use other ways, e.g., Tuwel submission comments

- Office Hour on agreement: Wiedner Hauptstraße 76/2/2

- esse@inso.tuwien.ac.at
Seminar aus Security WS20
Aim of the Lecture

*Seminar aus Security* provides *knowledge in selected topics of IT Security* in the form of *discussions*, a *comparative literature search* and a *presentation of the results*.

In particular, the following aspects are relevant:

- Audience-friendly work-up of a topic
- Presentation in a conference-like setting
- Giving and taking feedback
Lecture

- Select a base paper and use it as inspiration to choose your own paper title within the given subject area
- Search for relevant literature and present it
- Present the structure of your paper and your presentation
- Write the paper
- Review 2 papers of other students
- Improve your paper based on the student reviews
- Submit your final paper
- Present your results
Distance Learning

- Held remotely via INSO Jitsi
- Detailed room information/passwords in tuwel
- Web browser is needed in order to join
- Camera to show student ID

- email: lva.security@inso.tuwien.ac.at
- tuwel forum
Lecture – Schedule 1/2

01.10.2020, 16:15  Preliminary Discussion
05.10.2020, 23:55  Deadline for Registration in TISS
06.10.2020, 23:55  Publication of Base Papers
07.10.2020, 23:55  Begin Selection of a Base Paper in TUWEL
14.10.2020, 23:55  End Selection of a Base Paper in TUWEL
21.10.2020, 16:00-19:00  Presentation of the Literature
28.10.2020, 18:00-20:00  Presentation of the Slide and Paper Structure
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>25.11.2020, 23:55</td>
<td>Paper Submission</td>
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<tr>
<td>09.12.2020, 23:55</td>
<td>Review Submission</td>
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<tr>
<td>13.01.2021, 23:55</td>
<td>Final Paper Submission</td>
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<tr>
<td>27.01.2021, 16:00-19:00</td>
<td>Final Presentation</td>
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<tr>
<td>17.02.2021, 23:55</td>
<td>Voluntary Paper Enhancement Submission</td>
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Requirements for the Paper and the Slides

- **Paper**
  - Paper in English
  - Exactly 5 pages
  - Use the \textit{\LaTeX} template

- **Presentation/Slides**
  - Slides and presentation in English
  - 10 minutes for presentation, max. 5 minutes for discussion
  - Use the \textit{\LaTeX} template
Assessment Criteria for Papers

- Quality of the paper – max. 60 points
  - Content
  - Phrasing
  - Scientificity
  - Quality of the literature (be better than some published papers :))

- The paper is a literature paper only. You don’t have to write a paper based on your own practical research.

You can, however, if you want :)
Assessment Criteria for Reviews and Final Presentation

- Quality of the review – max. 20 points
  - Argumentation
  - Conclusiveness
  - Explanation

- Quality of the final presentation – max. 20 points
Requirements for the Submissions

- The paper, the paper diff and the slides must be PDF

- The submission of the final paper contains
  - The final paper
  - Colored changes between draft and final paper (use \texttt{latexdiff})

*Please mind requirements such as page numbers and structure*
Notes on Grading

- Deadlines are sharp!
- Breaking structure conventions leads to paper rejection (0 points)
- Only the final paper submission is graded, but submitting the first draft late will exclude you from the review process (You will automatically get 0 points for the reviews.)
- The points received on the voluntary paper enhancement submission replace the points received on the final paper submission
- You will receive a certificate after the first submission
Excerpt of Topics for WS2020

- ARM Trustzone
- Advanced Persistent Threats
- Android Security & Testing
- Anonymity
- Blockchain Technology
- Contact Tracing
- Cryptography
- Digital Signatures
- Exploit Mitigation
- Human Factors in IT Security
- (Machine Learning in) Intrusion Detection Systems
- Open-source intelligence (OSINT)
- Pentesting, Red Teaming
- Privacy in the Cloud
- Private Set Intersection
- Static Analysis
- Teaching Security
Support for Questions Regarding the Lecture

- Questions that are interesting/should be visible for other students as well
  - Tuwel forum
  - *Please note: We do not* monitor other forums
  - *Please do not use other ways, e.g. Tuwel submission comments*

- Specific questions
  - lva.security@inso.tuwien.ac.at – please state the lecture name as this e-mail address is used for multiple lectures
  - Office hour
Thank you!

https://security.inso.tuwien.ac.at/semsec-ws2020/