

ACM
WiSec
2020

13th ACM Conference on
Security and Privacy in Wireless and Mobile Networks

WiSec 2020 Opening

Virtual / run from HQ in Linz, Austria



Association for
Computing Machinery

Advancing Computing as a Science & Profession



Welcome!

- First virtual instance of WiSec, publicly live streamed ([YouTube](#)) and recorded, all recorded talks will be available afterwards
- Live interactivity via single video meeting (Zoom) for all participants and virtual conference venue ([dedicated Mattermost instance](#)) to retain some advantages of single-track conference format
- Conference time slots optimized for time zones in (eastern) North America, Europe, and (western) Asia based on authors and participants
- 3 days of conference plus 1 day of WiseML workshop

Welcome from ACM!



Gabriele Kotsis
President of the ACM (starting July 1, 2020)

Welcome to all of you!

Count

Belgium

1.8%

China

1.8%

United Arab Emirates

2.4%

United Kingdom

2.4%

France

3.6%

Sweden

3.6%

Austria

4.8%

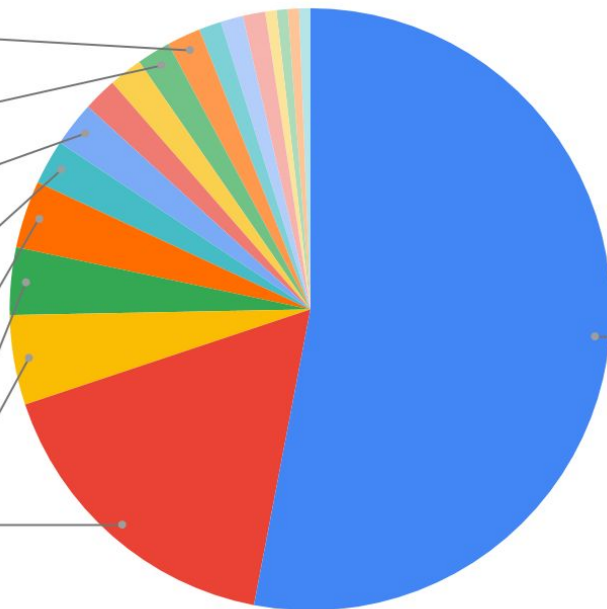
Germany

16.9%

**174 registered
participants from
18 countries**

United States

53.0%



Do's

- Interact, interact, interact
(it's a conference, not a journal)

<https://wisec-chat.ins.jku.at/wisec2020/>

- Learn from and respect each other, and always assume good intent
- Share the live streaming Youtube links with colleagues and a shout-out to what you find interesting in any form
- Tell us if anything is missing, not working, or you need special assistance

Don'ts

- Abusive behavior will not be tolerated
- Don't share material others may reasonably find offensive
- Try to not be offended by material from other cultures or other contexts
- Mistakes happen. Don't rant, over-criticise, or call others out → remain constructive in questions and feedback
- Don't widely share Zoom and Mattermost links, these are for registered participants to keep focused

Program selection

104 submissions

57 TPC-members

85 papers received 4 or more reviews, extensive discussion phase

30 accepted papers: 27 regular and 3 short papers

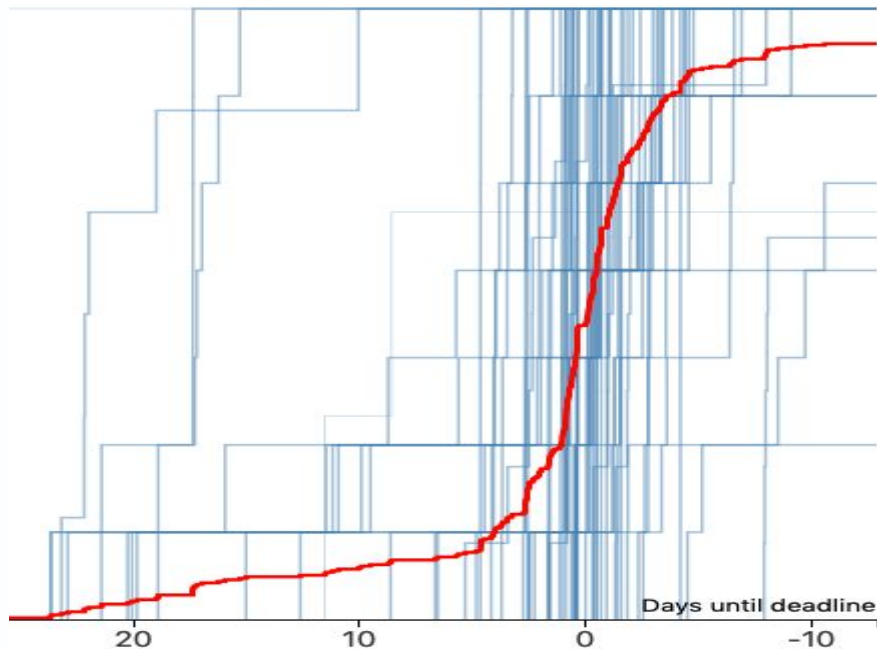
Acceptance Rate: 29%, focused shepherding of 9 papers

Turnaround time between submission and notification only 6 weeks

Thanks to our reviewers

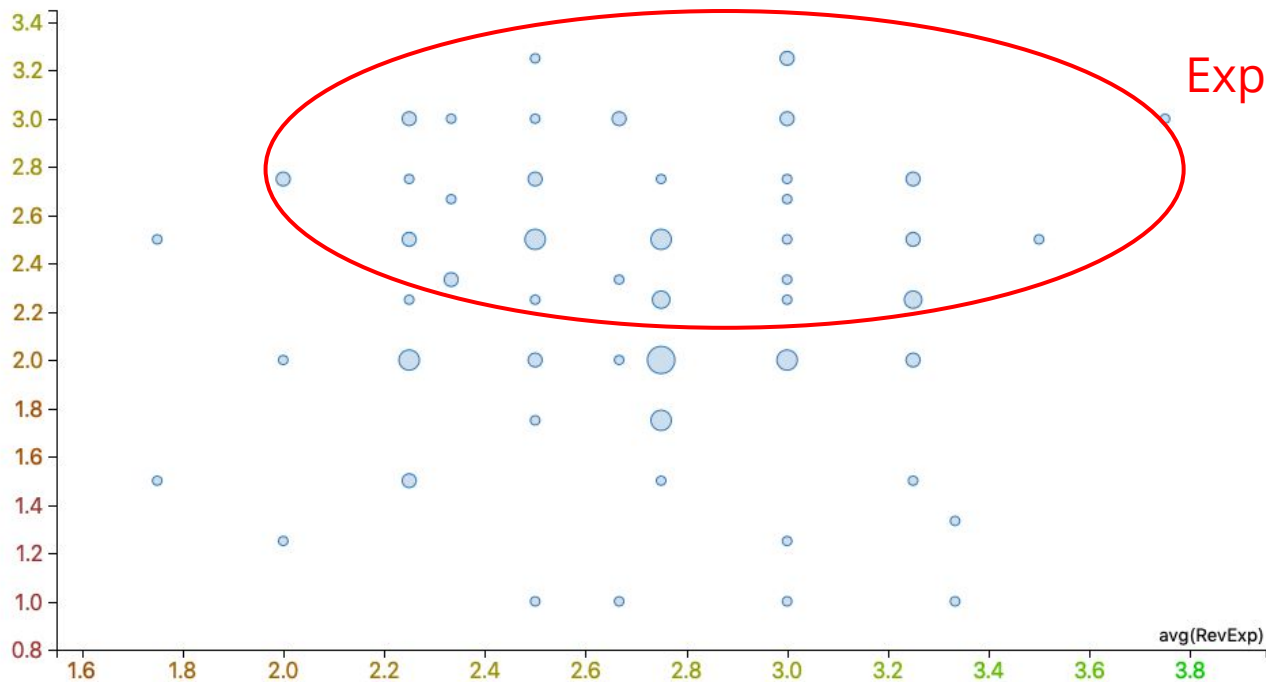
More than 95% of reviews finished

Thanks for your dedication even though the covid-19 pandemic was unfolding during our review phase, you contributed very high quality reviews!

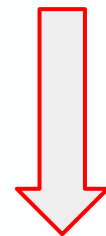


The big picture

avg(OveMer) vs. avg(RevExp)



Expert reviewers giving good review scores



Strong program :-)

Conference program

Organized as single (virtual) track with 9 sessions and split poster/demo track

Day 1, Wed July 8

S1: Pairing, authentication, and access control as first steps towards secure systems

Keynote 1: P. Papadimitratos

S2: Localization helps security

S3: To jam or not to jam

Day 2, Thu July 9

S4: Security analysis from PHY to APP

S5: Demos and Posters

S6: Hardware, firmware, and crypto

S7: Privacy risks and protection in smart environments

Day 3, Fri July 10

S8: Show me your fingerprints

Keynote 2: R. Grisenthwaite

S9: Location privacy in theory and practice

S10: Security in (future) cellular networks

WiSec: 13 Years and counting

As every year, WiSec innovates and keeps the good things from the past

Replicability label stronger than ever:
7 accepted submissions



21 out of 30 papers made pre-print available

Thanks to the organizers the Twitter account
is really alive and spreads the word

141 tweets and counting, 245 followers



Spread the word

12 out of 30 papers
produced video teasers

Combined more than 1k
views on youtube

Vote for the best teasers
in Mattermost!

| | | | | |
|---|---|---|--|--|
| Teaser: Hacksaw: Biometric-Free Non-Stop Web... 16 views · 4 days ago | Teaser: Analyzing the Attack Landscape of Zigbee-enabl... 73 views · 1 week ago | Teaser: Acoustic Integrity Codes: Secure Device Pairin... 96 views · 1 week ago | Teaser: Truncate after Preamble: PHY-based... 46 views · 1 week ago | Teaser: ChirpOTLE: A Framework for Practical... 70 views · 1 week ago |
| Teaser: BaseSAFE: Baseband SAnitized Fuzzing through... 115 views · 1 week ago | Teaser: Zigator: Analyzing the Security of Zigbee... 307 views · 2 weeks ago | Teaser: MAVPro: ADS-B Message Verification for... 56 views · 2 weeks ago | Teaser: Security in Terahertz WLANs with Leaky Wave... 136 views · 3 weeks ago | Teaser: Fingerprinting Encrypted Voice Traffic on... 111 views · 3 weeks ago |
| Teaser: Lost and Found: Stopping Bluetooth Finders from Leaking Private Information... 84 views · 3 weeks ago | Teaser: MagicPairing: Apple's Take on Securing Bluetooth... 133 views · 1 month ago | | | |

ACM WiSec Youtube Channel

Live stream of the conference

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Enjoy the conference!

If you haven't logged into the virtual
conference venue yet, please try it:

<https://wisec-chat.ins.jku.at/wisec2020/>



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WiSec 2020 Awards

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Best Paper Award

SVM: Secure Vehicle Motion Verification
with a Single Wireless Receiver

Mingshun Sun, Yanmao Man, Ming Li, and Ryan Gerdes



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Best
Paper
Award

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Best Poster Award

SemperFi: A Spoofer Eliminating
Standalone GPS Receiver

Harshad Sathaye and Aanjhan Ranganathan



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Best Demo Award

BTLEmap: Nmap for Bluetooth
Low Energy

Alexander Heinrich, Milan Stute, and Matthias Hollick



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Best
Poster
Award

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Best Teaser Recognition

BaseSAFE: Baseband SAnitized Fuzzing
through Emulation

Dominik Maier, Lukas Seidel, and Shinjo Park



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Best Teaser Recognition

MagicPairing: Apple's Take on Securing
Bluetooth Peripherals

Dennis Heinze, Jiska Classen and Felix Rohrbach



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Enjoy the keynote!

Richard Grisenthwaite (Arm Limited)
Arm Architecture Security Enhancements



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WiSec 2020 Closing

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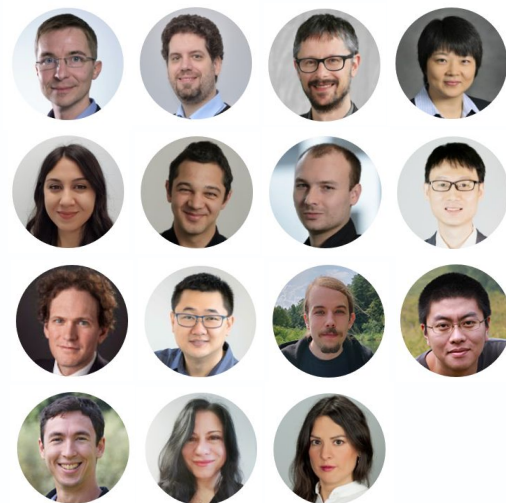


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Organization team

- General Chairs: René Mayrhofer, Michael Roland
- Technical Program Chairs: Matthias Hollick, Wenjing Lou
- Poster/Demo Chairs: Merve Sahin, Mathy Vanhoef
- Publicity Chairs: Kai Jansen, Feng Lin
- Travel Grant Chairs: Ryan M. Gerdes, Ning Zhang
- Publication Chairs: Max Maaß, Yao Zheng
- Web Chair: Daniel Hofer
- Local Orga: Severina Kehayova, Anja Hoffmann



Organization team

- Live Stream Directors:
Martin Schwaighofer, Philipp Hofer
- Zoom Meeting Management:
Gerald Schoiber, Michael Riegler, Lukas Wais, Thomas Raab
- Server and Networking Infrastructure:
Tobias Höller, Rudolf Hörmanseder
- Technical Support:
Franz Bauer, Omid Mir, Aya Mohamed, Michael Preisach, Markus Vogl
- Studio Equipment and Software License Support:
Ralf Hauber, Sandra Winzer, Johannes Zarl-Zierl & Team



Thanks to everybody!

Stay tuned for updates on WiSec 2021, which will
be announced on the web page



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