



GEEKCON 2024

International CyberSecurity Contest · Conference

Call for Participation

HELLO SINGAPORE!

We are coming!

GEEKCON 2024



May 25 - 26, 2024



OCBC Arena @ Sports Hub SG, **Singapore**



1500-2000 Global Attendees (On-Site)

Aiming to gather leading experts, top researchers, white-hat hackers, students, policymakers, practitioners and solution providers across **global cybersecurity industry**.



5 Technical Focuses

DAF Contest

AVSS Contest

GPT & Hackers

30+5 In-depth Sharing

Web3 & Hackers



SINGAPORE

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AI & HACKERS

GEEKCON



ABOUT GEEKCON

Cutting-edge, Neutral & Not-for-profit
Platform For International White-hat Hacker Community

G

GeekPwn 极客

Top 1 Security Geek Platform in China.
First Worldwide Security Geek Contest for Smart Life.

GEEKCON

2014

First Internet of Vehicles Security Contest

2015

First AI Security Contest

2016

First Security Contests on Big Data & Cloud Computing

2017

2018

First Security Contests for Youngsters

2019

First Security Contests on Anti Spy-Cameras

2020

First security geek contest programme "I Am a GEEK"

2021

2022

Upgraded to GEEKCON
Founded by DARKNAVY
First Security Contests on GPT

2023

2024

Stay tuned...

GEEKPWN MISSION

- Spawned dozens of pioneering PWNs through our groundbreaking design of contest, spanning from the Internet of Vehicles and AI to Drones and BlockChain.
- Facilitated the quantification of security researchers' skills and enhanced the visualization of their achievements.



2014 - 2023
15 EVENTS

GEEKCON VISION

- Striving to promote the visualization of security industry capabilities and to improve the quantification of its value.



National Recognition

Top 10 winners of GeekPwn recognized as high-level talents by the government of the first Chinese Free Trade Port.



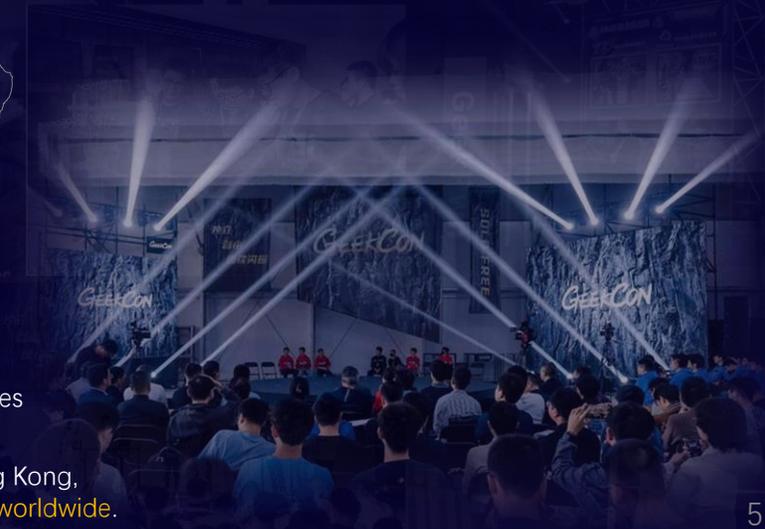
20000+
Attendees

2000+
Contestants

500+
Participating Teams

200+
Contest Categories

As of 2023, 15 GeekPwn/GEEKCON events has been held across Beijing, Shanghai, Hong Kong, Macao, Las Vegas, and Silicon Valley, attracting thousands of contestants and speakers worldwide.



G GeekPwn / GEEKCON Video Footages



Click to Watch



Highlights of
GEEKPWN 2014 - 2022



Click to Watch



Click to Watch



Click to Watch

Reported by
CCTV 315 Gala in 2016.
(01:27:31 – 01:34:26)

China's first hacker
documentary
"I Am a Hacker"
by CCTV in 2017.

China's first security
geek contest
programme
"I Am a GEEK" in 2021.



 Click to Watch 



GEEKCON 2023 CHINA Interview

G Industry Recognition and Acknowledgments Worldwide



1000+ Responsibly disclosing thousands of critical vulnerabilities.

200+ Helping hundreds of global hi-tech companies fix security bugs in their products.

Recognized & Acknowledged by



The **NO.1** & The **ONLY 1**

60+ GEEKCON COMMITTEE

- **30+** Industry front-runners
- **15+** Top Independent Researchers
- **15+** Renowned Academics



Past & Current Partners



G Featured Reports by Renowned Media



AL Jazeera



BBC News



CCTV News



CCTV 315 Gala

Prototype of the first Chinese hacker documentary, **"I Am a Hacker"** by CCTV in 2017.

100+ Global media outlets reports.

400,000,000+ Discussions in social media.



BBC, AL Jazeera, CCTV News Channel, China Daily, CGTN, People's Daily, CCTV News Weekly, CCTV News Probe, CCTV 315 Evening Gala, Guangming Daily, Xinhua News Agency, South China Morning Post, Ifeng News, IT Times, etc.



GEEKCON 2024 INTERNATIONAL SCHEDULE

G GEEKCON 2024 Call for Participation



Online GEEK CTF

Online Competition for **individual** security enthusiasts. Promoting to **Nurture** and **Develop Cybersecurity Talents** in Singapore. The **top 5** contestants will be awarded **prizes**. The **top 50** contestants will **win free tickets** to GEEKCON 2024 International Contest-Conference.

On-Site Events

2-Day Contest & Conference covering **Five Technical Focuses**. Everything about Hacking and Security.

Five Technical Focuses



Bridging the academic, industrial, students, and white-hat communities worldwide.



- Hackers vs. AI
- Will Hackers Outsmart AI, or Will AI Reign Supreme?

AI & Hackers
Annual Themed
Contest & Debate



- A "collision test field" for devices & systems
- Quantify and visualize the effectiveness of product mitigation mechanisms

AVSS
Contest



- Immersive hacking contest
- Limited time (within 20 minutes), unlimited targets and methods

DAF
Contest



- Tech-sharing by distinguished speakers
- Technical sharing in 30 minutes
- Demos / live hack shows in 5 minutes

30+5
In-depth Sharing



- How is money lost in the Web3 space?
- Replicating real-world Web3 attacks on-site.

Web3 & Hackers
Annual Themed
Contest & Debate

May 25

Morning

DAF Contest
30+5 In-depth Sharing

Afternoon

DAF Contest
AI & Hackers
30+5 In-depth Sharing

AVSS Contest (All Day)

May 26

Morning

DAF Contest
30+5 In-depth Sharing

Afternoon

DAF Contest
Web3 & Hackers
30+5 In-depth Sharing
Award Ceremony

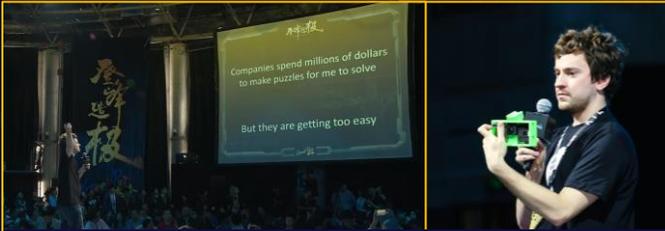
GEEKCON Gala Dinner



30+5 IN-DEPTH SHARING



Introduction & Examples



<https://www.youtube.com/watch?v=O3yT3h6XRx0>

In 2016, George Hotz, **the first-ever "iPhone & PS3 hacker"**, shared his latest researches and explained a lot about his ideas and what he wants. His speech attracted over 30,000 views online.



<https://www.youtube.com/watch?v=jDTXTLkKUCM>

In 2017, Nick Stephens, **an independent researcher**, shared how he pwned the Trust Zone of an Android phone. In GeekPwn 2016, he exploited the vulnerabilities, bypassed fingerprint authentication and unlocked the phone with an audience's nose.



In 2023, researchers from **Google Android Red Team** shared "Attacking the Pixel Modem Over The Air", explaining how they remotely compromised mobile baseband chips.

 **A speaker session** delving into the security of forefront technologies, such as ChatGPT, IoT, Internet of Vehicles, Blockchain, Mobile Networks and Application, Cloud and Virtualization, Data Security, Biometric Authentication, Cryptography, Zero Trust, etc.

 Inviting top white-hat hackers, renowned experts, security researchers, government agencies, policymakers, academics, and industry influencers **worldwide**.

 Revealing last year's **most sophisticated attacks** (such as Operation Triangulation and Ransom cases) and **most in-depth defenses**.

 Inspiring insights and practical solutions for the cybersecurity industry.



Submission Guidelines & Speaker Benefits

Submission Guidelines

- Format:
30-minute presentation on your hacking process, exploitation techniques, or other frontier research.
5-minute live hacking show or other interesting demo;
* Additional 5-minute Q&A session.
- Encouraging distinctive technical insights regarding your research.
Disencouraging discussion of common knowledge.
- Clarify the theme, introduction, and the innovative and unique aspects of the application.
Submit your application to cfp@geekcon.top by April 15th.
- Presentations aiming to market or promote commercial products or entities will be rejected without consideration.

Speaker Benefits

- The accepted speakers will receive certificates of honor and \$ 1200 USD cash prize (or other prizes of equal value) after the event.
- Breakfast and Lunch during conference days.
- Spectacular GEEKCON Parties.
- One complimentary event pass per Speaker.
- Travel Reimbursement: Up to \$ 1500 USD international.
- Accommodations: One hotel room for up to 3 nights for one speaking team. Room will be booked and paid for by GEEKCON at a designated property. Reimbursement not available if room booked outside designated room block.)
- Visa: If you need help applying for a visa, such as an official invitation to present to the Singapore embassy, please make sure to let the committee know well in advance. You can refer to the Ministry of Foreign Affairs Singapore for more information: <https://www.mfa.gov.sg/Consular-Services/Visitors/Visa-Information>.



DAF CONTEST

DAF CONTEST



Introduction & Examples



In 2015, contestants from **Tencent** remotely exploited vulnerabilities in the wireless communication between the remote controller and the drone to **seize control of the drone**. In the same year, numerous payment systems, routers, and cameras were hacked for the first time.

In 2020, a contestant from **Alibaba** interfered with the radar of an **autonomous car**, causing the car to mistakenly believe that there were no obstacles ahead and resulting in a crash. There were 3 different cars hacked in the contest in 2020.



In 2020, an **independent researcher** took advantage of the flaws in the scanning mechanism of the **security X-ray machine**, which made it failed to detect dangerous items in the package. Furthermore, **facial recognition** and **voice recognition** were both compromised in the same year.

In 2023, students from **Tsinghua University** took on the challenge of exploiting flaws in the **DNS protocol** and successfully executed several DDoS attacks on the specified targets. **Automotive, virtual machines, operating systems**, and more have all been compromised in the same year.



- Immersive and live hacking contest like no other.
- Showcasing cyber adversarial activities in smart devices and network services.
- Unveiling the real-world vulnerability exploitation and security threats.
- Encouraging all geeks to take the challenge and **PWN everything!**
- Inviting **more enthusiasts and young people** to join the white-hat community.

Limited time (within 20 minutes), unlimited targets and methods.



Objectives & Rules

Challenge Objectives

- Participants in the submission process can **select their own challenge targets**, encompassing commercially available or commonly used smart devices and software systems, including commercial/open-source software, IoT products, AI-related products, frameworks, and libraries.
- Through the **exploitation of security vulnerabilities** in their chosen targets, participants are **expected to achieve results** such as unauthorized control, unauthorized data access, circumventing original security mechanisms, or guiding the target to make incorrect decisions under reasonable attack conditions.

Challenge Rules

- Participants are **restricted to targeting the original systems, applications, or native security modules of device manufacturers**. The software or firmware version of the target device or security module must be **equal to or higher than the latest version 30 days before the contest** and **set to default or commonly used configurations**.
- GEEKCON** organizers, based on the information provided by participants regarding their chosen targets and versions, will **prepare corresponding contest equipment and environments**. Participants must complete the challenge within the contest environment. **In instances** where the organizer are unable to prepare the challenge environment, **participants can request to provide their own challenge equipment**. After verification and approval by the organizers, they can participate in the contest.
- The **technical methods and exploited security flaws** used by participants in the contest **must be self-discovered and implemented**. Publicly known or existing security flaws and techniques cannot be used as criteria for winning the contest. If the techniques and security flaws used by participants include non-self-discovered elements, they must inform the organizer during submission process.
- Participants must **complete the challenge within 20 minutes**. Failure to do so results in a challenge failure.



Evaluation Criteria & Participation Rewards

Evaluation Criteria

- Participants who successfully complete the challenge will be comprehensively **evaluated** by the GEEKCON committee based on the **technical difficulty, technical value, consequences & impact** of the challenge project, as well as **on-site performance**. The final score for the challenge project will be calculated.

Participation Prizes

- Participants are **not** required to provide **details of the vulnerabilities** used in their attack to the GEEKCON committee. However, after successfully completing the challenge project, they **must provide an overall explanation** of how the attack occurred.
- The committee will rate the attack based on the evaluation criteria, determine **ranks and awards according to the scores**, and distribute prizes accordingly.

- Submit to cfp@geekcon.top **by April 15th**. Please provide an overall description on the target, attack prerequisite, impact and how the attack happens (no need to provide vulnerability details).
- Evaluation** by the committee and **notifications** to submitters in **mid to late April**.
- On-site** challenges during **May 25th-26th** in Singapore.



AVSS CONTEST



Introduction

A "collision test field" for devices & systems based on the real adversarial network environment.

- Simulates real-world cyber adversarial activities.
- Pre-implant vulnerabilities in different versions of similar systems.
- Quantify and visualize the effectiveness of the mitigation mechanisms of different systems.
- Helping manufacturers evaluate and improve product security.
- Promote the visualization and quantification of cybersecurity industry achievements through offensive and defensive confrontations.

Targets: Android, Automotive ...



AVSS 网络安全碰撞测试场 手机赛道 决赛排行榜

剩余时间: 00:00

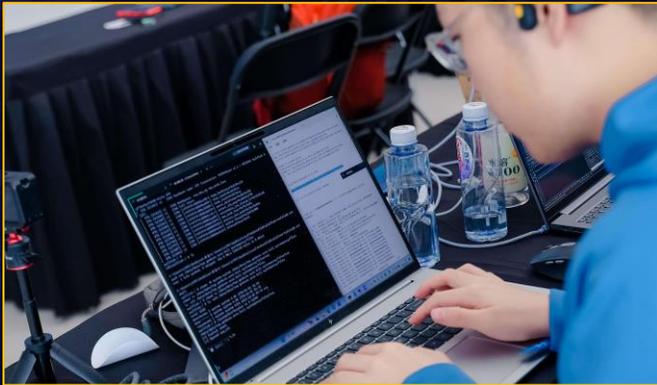
队伍	得分	APP: NoSign	APP: Email Thrott	APP: RW/Real call	APP: SELinux	Kernel: KNOX	Kernel: MTK
BlueThanos	7250	🟢 x 8	🟢	🟢	🟢	🟢	🟢
来自东方的神秘力量	3700	🟢 x 3	🟢	🟢	🟢	🟢	🟢
拼搏勇队伍	3600	🟢 x 3	🟢	🟢	🟢	🟢	🟢
Polaris	2500	🟢 x 4	🟢	🟢	🟢	🟢	🟢
NeSE	2500	🟢 x 2	🟢	🟢	🟢	🟢	🟢
天极Dubhe	1700	🟢 x 1	🟢	🟢	🟢	🟢	🟢



AVSS CONTEST



Overview of AVSS Contest 2024 International



排名	队伍	APP题得分	Kernel题得分	总得分
2	天枢Dubhe	513	811	90.49
3	BlueThanos	504	817	85.43
4	拼漏洞队伍	501	809	84.79
5	Polaris	300	1005	73.91
6	来自东方的神秘力量	200	1125	69.49



- Designed to target a diverse range of software and systems, with a particular emphasis on systems of mobile phones and V2X.
- Encompasses multiple challenge sets, each featuring distinct system environments that share common vulnerabilities.
- Primary objective: evaluate participants' proficiency in exploiting these vulnerabilities across varying systems.
- Format: Jeopardy-style contest (similar to CTF). Anticipated solutions exist for most challenges, exceptions may apply. Participants are required to leverage the specific attack vectors for exploitation.
- Online Qualifier: Exploiting specified vulnerabilities to retrieve flags.
- On-site Finals: Leveraging designated vulnerabilities to achieve specific exploitation.
- Prizes: To be determined based on the scores & ranks.

Open for Registration (<https://avss.geekcon.top/register/>): **Early March**.

Online Qualifier: **Late April** On-site Finals: **May 25th – 26th, Singapore**

Website: www.geekcon.top

X: GEEKCON@GEEKCONTOP



Introduction



- Annual Themed Contest & Debate
- A platform for **Web3 security researchers** to **disclose security risks**, **showcase security capabilities**, and **present Web3 security scenarios** and **challenges** to the traditional security community.
- Replicating real-world Web3 attacks on-site.

Format:

Live demos showcasing Web3 vulnerabilities and their impacts through attacks.

Schedule

- Submit to cfp@geekcon.top by **April 20th**.
- Evaluation by the committee and **notifications** to submitters in **mid to late April**.
- On-site contest during **May 25th-26th** in Singapore.



Vulnerability & Effect Requirements

Vulnerability Scope

- Real-world vulnerabilities in Web3 infrastructure and applications, including but not limited to L1/L2 public chains, cross-chain bridges, and smart contracts (whether fixed or not).
- N-day vulnerabilities will be given priority.
- Demonstrations may showcase significant past attack events, but must specify if the discovery is original or a reproduction.

Examples of Attack Effects

- Network failure, resulting in transaction confirmation issues or complete shutdown.
- Permanent chain split, needing a hard fork.
- Direct fund loss.
- Funds permanently frozen, requiring a hard fork.
- Counterfeit tokens.
- Unauthorized token transfers.

Effect Requirements

- Clear demonstration of security attack impact.
- Preference for live demos that can be presented on-site.
- Avoiding impacting normal Web3 infrastructure (public chains, cross-chain bridges, etc.) and Web3 applications directly.



Submission Guidelines

Submission Requirements

- 📄 Description of Vulnerability and Attack Effect.
- 📄 Description of Disclosure and Current Patching Situation.
- 📄 Description of Setup (testnet etc) required to reproduce the attack effect.
- 📄 Video recording (optional).
- 📄 For vulnerabilities that have not been made public, the submitting team needs to declare at the time of submission. GEEKCON committee will NOT ask for the 0-Day vulnerability details, however the participant should submit the vulnerabilities to corresponding entity after the event.

Evaluation and Ranking

- 📄 Participants who successfully complete the live demo challenge will be comprehensively evaluated by the GEEKCON committee based on the technical difficulty, technical value, consequences & impact of the challenge demo, as well as on-site performance. The final score for the challenge demo will be calculated.
- 📄 GEEKCON committee will rank the demos and provide corresponding prizes to participants.

AI & HACKERS



Introduction

- Annual Themed Contest & Debate
- A platform for researchers to deeply explore the relationships between AI and hackers, and showcase their latest security researches on AI.
- Embracing scientific thinking and encourages all ideas from everyone.
- Defending on your ideas through convincing research results related to the theme.

Format: *Live demos showcasing AI vulnerabilities, attacks & defenses through AI and their impacts.*



- Submit to cfp@geekcon.top by April 20th.
- Evaluation by the committee and notifications to submitters in mid to late April.
- On-site contest during May 25th-26th in Singapore.

Schedule



Problem & Effect Requirements

Problem Scope

- 📄 Attacks against AI Large Models, including, but not limited to, jail-breaking, prompt injection, adversarial attack, remote code execution, etc.
- 📄 Using AI for autonomous offensive cybersecurity tasks, including, but not limited to, autonomous pentesting, web hacking, exploiting, and CTF.
- 📄 Using AI for autonomous defensive cybersecurity tasks, including, but not limited to, vulnerability discovery, reverse engineering, and jailbreak defense.

Examples of Attack Effects

- 📄 White-box or Black-box jail-breaking attack methods for Large Models.
- 📄 Jailbreak defense using Large Models or self-trained models.
- 📄 Novel adversarial attack methods against Large Models.
- 📄 Remote code execution against Large Models based applications.
- 📄 Successful pentesting or CTF using AI.
- 📄 Effective vulnerability detection using AI.

Effect Requirements

- 📄 Clear demonstration of security attack impact.
- 📄 Preference for live demos that can be presented on-site.
- 📄 Avoiding impacting normal Large Models infrastructure and target applications directly.



Submission Guidelines

Submission Requirements

- 📄 Description of Problem and Attack Effect.
- 📄 Description of Disclosure and Current Patching Situation.
- 📄 Description of Setup (environment etc) required to reproduce the attack effect.
- 📄 Video recording (optional).
- 📄 For vulnerabilities that have not been made public, the submitting team needs to declare at the time of submission. GEEKCON committee will NOT ask for the 0-Day vulnerability details, however the participant should submit the vulnerabilities to corresponding entity after the event.

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GEEKCON 2024

International CyberSecurity Contest · Conference

Singapore May

Shanghai Oct.

Submission Desk: cfp@geekcon.top

Website: www.geekcon.top

X: [GEEKCON@GEEKCONTOP](https://twitter.com/GEEKCON@GEEKCONTOP)