

KAI-HSIANG (ALLEN) CHOU

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EDUCATION

- Bachelor of Science in Computer Science and Information Engineering** *2018 - 2024 (Expected)*
National Taiwan University, Taipei, Taiwan
- Bachelor of Arts in Philosophy (Double-major)** *2020 - 2024 (Expected)*
National Taiwan University, Taipei, Taiwan

PUBLICATIONS

Peer-Reviewed Articles

- Capturing Antique Browsers in Modern Devices: A Security Analysis of Captive Portal Mini-Browsers**
P.-L. Wang, **K.-H. Chou**, S.-C. Hsiao, A.-T. Low, T. H.-J. Kim, and H.-C. Hsiao
International Conference on Applied Cryptography and Network Security (ACNS), June 2023
Best Student Paper Award
- Investigating Advertisers' Domain-changing Behaviors and Their Impacts on Ad-blocker Filter Lists**
S.-C. Lin*, **K.-H. Chou***, Y. Chen, H.-C. Hsiao, D. Cassel, L. Bauer, and L. Jia
The Web Conference (TheWebConf), April 2022

Manuscripts

- A Privacy-Preserving Group Messaging Protocol against Adversarial Chatbots**
K.-H. Chou, I.-M. Lin, H.-C. Hsiao

*: Equal Contributions.

WORK EXPERIENCE

- Yahoo!** *Jul. 2022 - Aug. 2022*
SWE Intern at Search Engineering Team *Taipei, Taiwan*
- Implemented a backend system with RESTful API using Next.js and PostgreSQL to store tourist attractions and planned trips.
 - Developed a Chrome extension to show recommended attractions on Yahoo's search results page.
- AirTaiwan Project at Environmental Economics Lab** *Sep. 2020 - Oct. 2021*
App Developer *Taipei, Taiwan*
- Built an iOS and Android app using React Native to allow users to search for local air quality.
 - Implemented a feature that alerts users of poor air quality using background location.
- Microsoft** *Oct. 2019 - Jun. 2020*
Technical Assistant Intern at Microsoft Consulting Services *Taipei, Taiwan*
- Participated in developing the Hospital Information System of Shin Kong Wu Ho-Su Memorial Hospital.
 - Took charge of the Death Certificates and Paper Medical Records management systems.
 - Improved performance of message notification system by 95%.
- Undergraduate Research Assistant** *Sep. 2019 - Present*
Network Security Lab, National Taiwan University *Taipei, Taiwan*
- Advisor: Prof. Hsu-Chun Hsiao
 - Topics: web security, browser security, applied cryptography, and secure messaging.

TEACHING

- Cryptography and Network Security** *Spring 2023*
Teaching Assistant
- Designed the homework problems, including mathematical proofs and CTF challenges.
 - Graded the homework, midterm, and final projects.
 - Held TA sessions to answer student questions and guide students in completing the homework.
- Sprout Program** *Mar. 2021 - Present*
Lecturer (in a team of 5+ lecturers)
- Provided free or affordable Python lectures to high school students to inspire interest in CS.
 - Mentored 50+ high school students to complete various labs and projects.
 - Student Evaluation: 4.47/5 (2021), 4.48/5 (2022)

TALKS

Web Tracking and Browser Fingerprinting <i>GCC (Global Cybersecurity Camp) 2023 Singapore</i>	<i>Feb. 2023</i> <i>Singapore</i>
Timing Attack: From Beginning to Expired <i>HITCON (Hack in Taiwan Conference) 2022 Workshop</i>	<i>Aug. 2022</i> <i>Taipei, Taiwan</i>
On the Dictatorship of Black Box Algorithms <i>The Campus Computer & Network Society of NCKU</i>	<i>Apr. 2020</i> <i>Tainan, Taiwan</i>
How Do Computers Draw? A Brief Introduction to Image-Based Artistic Rendering <i>SITCON (Students' Information Technology Conference) 2020</i>	<i>Aug. 2020</i> <i>Taipei, Taiwan</i>
HITCON 101 - Introduction to Cryptography <i>HITCON (Hack in Taiwan Conference) 2018</i>	<i>Jul. 2018</i> <i>Taipei, Taiwan</i>

AWARDS

Best Student Paper Award <i>ACNS 2023</i>	<i>Jun. 2023</i>
First Place in Security <i>iThome Ironman Technical Article Writing Competition 2022</i>	<i>Sep. 2022</i>
Best Independent Study in Cryptography and Cryptanalysis <i>Advanced Information Security Summer School (AIS3) 2019</i>	<i>Aug. 2019</i>

PUBLIC SERVICES

Information Department, NTU Student Association

Member (2022), Deputy Chief (2023)

- Served as student representative in university meetings on enacting personal data protection and data sharing regulations, actively contributing to enhanced privacy and transparency in the final regulations.
- Communicated the university's information security and data protection policies and practices to students.
- Proposed and implemented user interface and user experience guidelines for the university's information systems.

Activity Team, HITCON (Hack in Taiwan Conference)

Member (2021), Team Leader (2022), Vice Team Leader (2023)

- Led team of 20+ members to plan and execute events at HITCON, a thousand-attendee security conference, facilitating engagement and networking.
- Developed web-conferencing software with virtual meeting rooms for conferences during the pandemic, contributing to RPC library, video conferencing integration, and production deployment.

Agenda Team, SITCON (Students' Information Technology Conference)

Member (2016, 2017), Team Leader (2019, 2020)

- Led a team of 10+ members to manage the agenda of a thousand-attendee, student-oriented conference, including call for papers, reviewing submissions, and inviting keynote speakers.
- Organized panel discussions on a wide range of topics, from promoting nation-wide information education in high schools to the risks of algorithmic decision-making.

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