Networking & Cybersecurity

[1] C. Simoiu, A. Zand, K. Thomas, and E. Bursztein, "Who is targeted by email-based phishing and malware? Measuring factors that differentiate risk," in *Proceedings of the ACM Internet Measurement Conference*, New York, NY, USA, Oct. 2020, pp. 567–576. doi: 10.1145/3419394.3423617. https://dl.acm.org/doi/10.1145/3419394.3423617

- Claim: a person's demographics, location, email usage patterns, and security posture all significantly influence the likelihood of a phishing/malware attack.
- Evidence: Based on analysis of 1.2 billion emails and average of 17 million weekly targeted users, the odds of being targeted were calculated across different countries and demographics.

Software Development

[1] J. Chen *et al.*, "Wireframe-based UI Design Search through Image Autoencoder," *ACM Trans. Softw. Eng. Methodol.*, vol. 29, no. 3, p. 19:1-19:31, Jun. 2020, doi: 10.1145/3391613. https://dl-acm-org.ecsu.idm.oclc.org/doi/10.1145/3391613

- Claim: A newly developed UI Design Search engine performs better than existing methods.
- Evidence: Researchers recruited five participants who used the search engine and a baseline method, and classified designs as relevant or irrelevant to the query UI. The new method performs better.

Random Number Generation

[1] V. Fischer and M. Drutarovský, "True Random Number Generator Embedded in Reconfigurable Hardware," in *Cryptographic Hardware and Embedded Systems - CHES 2002*, Berlin, Heidelberg, 2003, pp. 415–430. doi: 10.1007/3-540-36400-5_30. https://link.springer.com/content/pdf/10.1007/3-540-36400-5_30.pdf

- Claim: A true random number generator can be created in embedded hardware
- Evidence: the random number generator passes several statistical tests (NIST test suite

Data storage / compression

[1] Q. Jiancheng, L. Yiqin, and Z. Yu, "Parallel Algorithm for Wireless Data Compression and Encryption," *J. Sens.*, vol. 2017, p. 4209397, Feb. 2017, doi: 10.1155/2017/4209397. https://www.hindawi.com/journals/js/2017/4209397/

Claim: An algorithm for wireless data compression performs better than WinRAR and 7zip.
Evidence: Comparison of their tool (ComZip) with others on 6 files that are generally multiple GB in size. ComZip can get better performance (smaller compressed file size) in some cases).