Gaukas Wang

E-mail: i@gaukas.wang | GitHub: github.com/gaukas | Portfolio: gauk.as

EDUCATION

University of Colorado Boulder — Boulder, CO
Computer Engineering

Bachelor of Science (B.Sc.), Summa Cum Laude — *Aug 2018 - May 2021*
Doctor of Philosophy (Ph.D.), Advisor: Prof. Eric Wustrow — *Aug 2022 - May 2027(est.)*

RESEARCH AREA

Anti-Censorship: Censorship Analysis, Circumvention, Measurements
Network, Privacy, and Cybersecurity: Network Measurements, Application Fingerprinting, AppSec

SELECTED PUBLICATIONS

MRTOM: Mostly Reliable Totally Ordered Multicast — Distributed Systems, Multicast
To appear at ICDCS'2023 — *July 2023*

Chasing Shadows: A security analysis of the ShadowTLS proxy — Censorship, Computer Network
In Proceedings of FOCI'2023 — *Feb 2023*

Acuerdo: Fast Atomic Broadcast over RDMA — Atomic Broadcast, RDMA, Consensus
In Proceedings of ICPP'2022 — *Aug 2022*

OTHER SELECTED CONTRIBUTIONS

uTLS
Low-level access TLS ClientHello mimicry library in Go, allowing low-level access to TLS Handshake

clienthellod
A TLS ClientHello and QUIC Handshake Initial Packet parser for fingerprinting purposes

CVE-2021-36539
Unbound File Access vulnerabilities in Canvas LMS by Instructure, Inc.

CVE-2021-28681
DTLS Man-in-the-Middle(MITM) vulnerabilities in pion/webrtc by Pion

WORKING EXPERIENCE

Graduate Student Researcher — Go/Rust | Censorship, Cybersecurity, Network
University of Colorado Boulder — *Aug 2022 - Present*

Fullstack Software Engineer — C++/JavaScript/Python | Fullstack, MySQL, REST API
Intelepeer Cloud Communications LLC — *Aug 2021 - June 2022*

Undergraduate Research Assistant/Researcher — C++/Go | Distributed Systems, Network, RDMA
University of Colorado Boulder — *Apr 2020 - Apr 2022*

TEACHING EXPERIENCE

Teaching Assistant
University of Colorado Boulder

ECEN-CSCI 4133-5133: *Fundamentals of Computer Security* — *Expected Fall'23*
ECEN-CSCI 4313-5313-7000: *Concurrent Programming* — *Fall'20, Fall'22*
ECEN 1310: *C Programming for ECE* — *Spring'20, Spring'21*