Ganyuan Cao

Arizona State University
Tempe, AZ, 85281
E-mail: gcao5@asu.edu
Site: gansama.github.io

OBJECTIVE

A Ph.D. student in the field of Computer Science with a concentration on Cybersecurity. My research focuses on Cryptography with interests in blockchain and succinct computational-integrity algorithms.

EDUCATION

- *Bachelor of Science,* Computer Science
  Arizona State University, Tempe, AZ, May 2020
  Concentration: Cybersecurity
  Minor/Certificate : Cryptology
  Honors: Summa Cum Laude (GPA: 3.83/4.0)

SKILLS & ENDORSEMENTS

- *Relevant Knowledge:* Cryptography, Blockchain, Abstract Algebra
- *Programming Languages:* Python, C/C++, Java
- *Mathematical Computation:* Wolfram Mathematica, Pari/GP
- *OS & Framework:* Linux, Docker
- *Text Editing:* LaTeX, Markdown

EXPERIENCE

Researcher Fall 2017 - May 2020
Laboratory of Security Engineering for Future Computing(**SEFCOM**),Arizona State University

- Work on algorithms and protocols to increase the Proof-of-Work blockchain mining efficiency while persevering the original security features.

PUBLICATIONS & POSTERS

1. Xue, Tengfei, Yuyu Yuan, Zahir Ahmed, Krishna Moniz, **Ganyuan Cao**, and Cong Wang. "Proof of Contribution: A Modification of Proof of Work to Increase Mining Efficiency." In 2018 IEEE 42nd Annual Computer Software and Applications Conference (COMPSAC), pp. 636-644. IEEE, 2018.
2. **Cao,Ganyuan**. "Estafette : A Parallelized Block Generation Protocol to increase scalability of cryptocurrencies". In 2018 Arizona State University CryptoRally poster session.

ACADEMIC AWARDS

Dean's List Fall 2016 - Spring 2018, Spring 2019 - Spring 2020
Ir.A Fulton School of Engineering, Arizona State University