

We are looking for highly motivated, hardworking, and self-driven Ph.D. students to conduct research in the areas of applied cryptography and network security. We have **(fully funded) multiple Ph.D. positions** starting from Spring or Fall 2023 at the University of South Florida (USF).

Funding: All accepted Ph.D. students receive a yearly package worth approximately \$60,000, which covers all the tuition, health insurance, fringe benefits, and a competitive monthly salary (low taxes and no state tax in FL). Summer teaching and industrial internship opportunities are also possible.

USF is a Rank-1 Research University, and USF CSE is top 15% among Computer Science departments in public universities based on Academic Analytics data based on Scholarly Research Index (and top 8th for invention disclosures in the USA). USF offers a competitive salary with an excellent working environment, all within proximity to high-tech industry and the beautiful beaches of sunny Florida. Tampa/Orlando area is in Florida High Technology Corridor and harbors major tech and research companies. The qualified candidate will have opportunities for research internships and joint projects with high-tech companies. The candidate will work on the design, analysis, and deployment of new cryptographic schemes and protocols in various practical application domains. Research topics include but are not limited to:

- **Trustworthy Machine Learning (TML)**
 - Privacy-Preserving Machine Learning
 - Adversarial Machine Learning
 - Distributed and Secure Systems

- **Trustworthy Blockchains**
 - Use of blockchain infrastructure to enhance cyber-security
 - Cryptographic protocols to enhance the trust and privacy on blockchains
 - Post-quantum secure blockchains

- **Secure Internet of Things and Systems (IoTs) and Wireless Networks**
 - Light-weight cryptography for IoT
 - Cryptographic protocols for vehicular and UAV networks
 - Post-quantum secure IoTs

- **Privacy-Enhancing Technologies**
 - Secure Multi-party Computation
 - Distributed cloud security
 - Breach-Resilient Infrastructures (Protection of Genetic/Medical Data)

The qualified candidate is expected to conduct innovative research on the aforementioned areas based on their experience and research interests. It is also expected that the qualified candidate has

a good background in Computer Science and Math (i.e., algorithm, data structure, number theory and algebra). Solid programming skills are also expected.

The candidate should fulfill the following requirements:

- A BS degree in ECE/CS with a high-GPA and research experience.
- Very good programming skills (e.g., C, C++), familiarity with Linux.
- Having prior courses on cyber-security is desirable.
- MS degree in ECE/CS/Math is a big plus (high-GPA, courses on cryptography and/or network security).
- Publications in security and privacy will be regarded as a plus but not required.

To apply please send (by e-mail) the following documents:

1. Transcripts
2. Curriculum vitae
3. Three reference letters (will be sent by referees during interview process)
4. Previous publications, if any

Preferred Application Deadline): ASAP for evaluation.

Formal Application Deadline: Please see below.

<https://www.usf.edu/admissions/graduate/admission-information/requirements-deadlines.aspx>

Contact: Dr. Attila A. Yavuz

E-mail: attilaayavuz@usf.edu

Webpage: <http://www.csee.usf.edu/~attilaayavuz/>

After pre-screening is done, if selected, you will be contacted for an online interview process.