

# Ghazaleh Keshavarzkalhori

Email: Ghazaleh.Keshavarzkalhori@uab.cat  
Google Scholar: Ghazaleh Keshavarz Kalhori  
Github ID: qatkk  
Mobile: +34-603-679-382  
Location: Barcelona, Spain

## EDUCATION

- **Universitat Politècnica De Catalunya (UPC)** Barcelona, Spain  
*Master of Cybersecurity* 2024 - Now
- **University of Tehran** Tehran, Iran  
*Bachelor of Electrical Engineering - Telecommunication; Major GPA: 16.51/20* 2018 - 2023
- **Farzanegan Highschool(National Organization for Development of Exceptional Talents)** Tehran, Iran  
*Mathematics ; GPA: 19.88/20* 2014 - 2018

## PUBLICATIONS

- **Building Resilient AI: A Solution to Data and Model Poisoning Prevention:** SinConf 2024, IEEE Explore Proceeding
- **A blockchain-based privacy-preserving anti-collusion data auction mechanism with an off-chain approach:** Journal of Supercomputing, Springer
- **Federify: A Verifiable Federated Learning Scheme based on zkSNARKs and Blockchain:** IEEE Access
- **Unmasking the Illusion: The Shortcomings of Zero-Knowledge Rollups in Achieving Scalability:** RECSI 2024, National Security Reunion of Spain

## RESEARCH EXPERIENCE

- **Enhancing Privacy in Channel Announcement of Lightning Network** UAB, UPC  
*DISCRYPT*
  - **Supervisors:** Jordi Herrera Joancomartí, Cristina Perez-Sola, Jorge Luis Villar
  - **Master thesis:** Jan 2025 - Now
  - **Scheme design:** Using Zero-knowledge proofs for preserving privacy of channel owners while announcing their channels meanwhile proving the authenticity of the channel.
- **Verifiable Federated Learning Using zkSNARKs** UAB  
*DISCRYPT*
  - **Supervisors:** Jordi Herrera Joancomartí, Cristina Perez-Sola
  - **Research Assistant:** Mar 2023 - Now
  - **Scheme design:** Enhancement of the previous project of provable federated learning on blockchain with the help of Zero-knowledge proofs
- **Verifiable Federated Learning** University of Tehran  
*SCL*
  - **Supervisor:** Mohammad Ali Akhaee
  - **Research Assistant:** Sep 2021 - Sep 2022
  - **Implementation:** Implementation of a provable federated Gaussian naive Bayes classifier on blockchain
- **Sharding in Blockchain** University of Tehran  
*Data lab*
  - **Supervisor:** Behnam Bahrak
  - **Research Assistant:** Mar 2022 - Sep 2022
  - **Research and literature review:** Through research and literature review about sharding in blockchain
- **Sealed-bid Auction for Big-data Management** University of Tehran  
*SCL*
  - **Supervisor:** Mohammad Ali Akhaee
  - **Intern:** Jun 2021 - Sep 2021
  - **Project:** Implementation of the project, Literature review

## SKILLS SUMMARY

- **Languages:** Python, C++, JavaScript, Solidity
- **Platforms:** Linux, Zokrates, Arduino, Raspberry, ROS
- **Soft Skills:** Leadership, Event Management, Time Management

## LANGUAGE

- English (C1, TOEFL Score: Reading :25|| Listening:29|| Speaking: 24|| Writing:25|| Overall:103)
- Spanish (B2)
- Persian (Native)