Muhammad Islam Kamran

MPhil in Computer Science and Cryptography

Introduction

I have 2+ years of expertise am quite well in all facets of multimedia encryption and cryptography. I am skilled in development with MATLAB and security. Additionally, I'm looking for a company where I can use my experience and abilities to participate as a team member. I enjoy working in a security atmosphere since I am technical and rational.

Professional Experience

2020-2022 **Research Fellow**, *Quaid.i.Azam University*, Islamabad, Pakistan.
Working on building of new multimedia Image Encryption algorithm using Quantum computation algorithm.

2019-2020 **Trainee**, *Flutter Application developer for Android and IOS*, PureTech, Pvt. Ltd., Peshawar, Pakistan.

Education

2020-2022 **MPhil**, *Quaid.i.Azam University*, Islamabad, Pakistan, *CGPA - 3.7/4.00*.
Computer Science and Cryptography (Multimedia Image Encryption, Quantum Computing, and Chaos)

2016-2020 **BS**, *University of Engineering & Technology*, Peshawar, Pakistan, *CGPA - 3.32/4.00*.
Computer Systems Engineering (C/C++, Data Structure & Algorithms, Data Analytics, OOP, and Computer Security

Research Publications

Journals, *Published*.

1. **Kamran, M. I.**, Khan, M. A., Alsuhibany, S. A., Ghadi, Y. Y., Arif, J., and Ahmad, J. "A Highly Secured Image Encryption Scheme Using Quantum Walk and Chaos." Computers Materials and Continua, 73(1), 2022 (SCI).

Projects

Image Encryption Using Quantum Walk Algorithm.
○ Quantum Walk Algorithm
○ Secure communication between different end nodes
○ Secured delivery of sensitive Image data.
  - Duration: September(2021) - May(2022)

Object Detection and Characterization of Traffic Using Live Video Stream With Machine Learning Algorithm Software.
○ A project for detecting number of vehicles and pedestrians on road and counting their number for traffic controlling.
  - Duration: September(2019) - July(2020)

Human Face detection using Open-CV.
- A desktop application for detecting human faces.
  - Duration: September 2019 - October 2019

Concept TV.
- Implemented a Trainee project at PureTech Pvt. Ltd in Dart(Flutter)
  - Duration: June 2019 - September 2019

Areas Of Interest

- Computer Security
- Multimedia Encryption
- Cryptography
- MATLAB for Development

Awards and Distinctions

- Research Fellow funded at Quaid.i.Azam University, Islamabad
- Graduated among top 10 2020 batch at Department of Computer Systems Engineering, UET Peshawar, Pakistan
- Awarded by Higher education commission HEC, Pakistan
- Vice Chancellor Islamia College Peshawar topper of the year talent Award

Certifications

2019 MATLAB Onramp

2019 Microsoft Word

2018 Introduction to Packet tracer

Academic Skills

Theoretical knowledge and competences.
I have gained a solid understanding of ideas related to computer security, encryption algorithms, quantum computing algorithms, and security of multimedia during my research fellowship.

Encryption Tools and Algorithms.

- AES
- DES
- Quantum Walk
- Multimedia Encryption
- XORing
- Chaos
- Logistic Maps
- MATLAB

Programming Skills: .
C, C++, MATLAB, System Programming, OOP, Flutter, Verilog HDL

Organisational Skills and Competences

Lead 2 projects under supervision of Prof. Dr. Muazzam Ali Khan Khattak and Prof. Dr. Nasru Minallah, I can operate under pressure and meet deadlines because I have leadership skills. I am aware that being provoked by peers and inferiors will not make me angry.

Social Skills

Being good at meeting new acquaintances, adjusting to new teammates while studying in a multi ethnic setting, and interacting with people from various cultures and ethnicities

Languages

English:	Official/Academic Language	*(Advanced level speaking, reading and writing skills)*
Urdu:	National/Official Language	*(Advanced level speaking, reading and writing skills)*
Pashto:	Native Language	*(Advanced level speaking, reading skills)*
Punjabi:	Native Language	*(Limited Speaking level, good understanding level skills)*

References

Prof. Dr. Muazzam Ali Khan Khattak,
○ Faculty, Quaid.i.Azam University, Islamabad and Adjunct Graduate Faculty, UMKC ,
○ Email: muazzam.khattak@qau.edu.pk

Associate Prof. Dr. Rabeeh Ayaz Abbasi,
○ HOD, Department of Computer Science, Quaid.i.Azam University, Islamabad, Pakistan,
○ Email: rabbasi@qau.edu.pk

Prof. Laiq Hasan,
○ Faculty, Department of Computer System Engineering,University of Engineering and Technology , Peshawar, Pakistan,
○ Email: laiqhasan@gmail.com