Huma Jamil

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EDUCATION

Doctor of Philosophy (Ph.D.), Colorado State University, Fort Collins, Colorado (August 2021 – May 2026)

Computer Science – GPA: 4.00

Master of Science (MS), Quaid-i-Azam University, Islamabad, Pakistan (September 2018 – June 2020)

Mathematics – GPA: 4.3/5.0

Bachelor of Science (BS), Quaid-i-Azam University, Islamabad, Pakistan (September 2014 – June 2018)

Mathematics – GPA: 3.5

EXPERIENCE

Graduate Research Assistant - Computer Vision

Colorado State University, Fort Collins, Colorado (August 2021 – present)

- Collaborating with Mathematics department on a DARPA project on Geometry of Learning.
- Studying the geometry of neural networks and its Application in Adversarial AI and Explainable AI.
- Finding the canonical space for Adversarial embeddings to create a detection mechanism for the adversarial data.

Graduate Teaching Assistant – Algorithm: Theory and Practice

Colorado State University, Fort Collins, Colorado (August 2021 – May2022)

- Helped with the curriculum's ongoing development and design. Supported a scholarly and research-based method of teaching and learning for students.
- Hosted in-person and online office hours and relevant labs to help student understand the content and explained mathematical concepts
- Timely graded tests and assignments, gave insightful feedback on the students' work, highlighting their areas of strength and need for improvement.

Teaching:

Volunteer at iCodeGuru, Pakistan (Sep 2020 - June 2021)

- Assisted 100+ students in improving their coding skills
- Taught data structures and algorithms
- Taught data analysis with google sheets
- Presented 100+ Leetcode questions
- Lead the team of volunteers to manage that platform

PUBLICATION

 T. U. Haq, T. Shah, G. F. Siddiqui, M. Z. Iqbal, I. A. Hameed and H. Jamil, "Improved Twofish Algorithm: A Digital Image Enciphering Application," in *IEEE Access*, vol. 9, pp. 76518-76530, 2021, doi: 10.1109/ACCESS.2021.3081792.

PROGRAMMING LANGUAGES AND SKILLS

- Python (intermediate)
- C++ (intermediate)
- Matlab (beginner)

- Computer Vision
- Cryptographic Protocols
- Adobe Illustrator

LANGUAGES

- English
- Urdu

HONORS AND AWARDS

- Earned fully funded scholarship for PhD
- Earned Merit Scholarships throughout the Master and Bachelor
- Participated in all Pakistan Women Singles and Doubles Badminton tournaments
- Won interdepartmental badminton championship twice (2018, 2019)