Muhammad Mohzary, Ph.D.

CONTACT INFORMATION	Assistant Professor
	Department of Computer Science
	Jazan University
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RESEARCH INTERESTS

My research interests generally lie in the broad area of Big Data Analytics and Privacy, with specific emphasis on Machine Learning, Deep Learning, Computer Vision, and Privacy-Enhancing Technologies. My research focuses on building computer vision solutions that address real-world challenges in Healthcare, Smart Agriculture, Smart Cities, Intelligent Crowed Engineering, and Biometrics Anti-Spoofing to enhance societal well-being and security.

EDUCATION

University of Missouri–Kansas City, MO, USA
Ph.D., Computer Science — 2019 - 2023
Advised by Sejun Song, Ph.D. & Baek-Young Choi, Ph.D.

Kent State University, OH, USA
M.S., Computer Science — 2016 - 2018
Advised by Kambiz Ghazinour, Ph.D.

Jazan University, Saudi Arabia
B.S., Computer Science — 2008 - 2013

EXPERIENCE

Jazan University, Saudi Arabia

Assistant Professor, Department of Computer Science	2023 - Present
Lecturer, Department of Computer Science	2021 - 2023
Teaching Assistant, Department of Computer Science	2013 - 2021

Administration and Academic Services:

(University Level):

Member of the Permanent Committee for Drafting the University Strategy (2026-2030)	2024 - Present
Member of the Engineering and Technology Research Center Board, Jazan University	2024 - Present
Member of the Supervisory Committee for Organizing the Digital Entrepreneurship Challenges in the Jazan Region (Hackathon Jazan 2024)	2024 - Present

(College Level):

Chair of Scientific Research Committee, College of Computer Science and Information Technology, Jazan University	2023 - 2024
Chair of Innovation & Entrepreneurship Committee, College of Computer Science and Information Technology, Jazan University	2023 - 2024

Member of Teaching & Learning Unit, College of Computer Science and Information Technology, Jazan University	2023 - 2024
Member of Plans and Curriculum Committee, College of Computer Science and Information Technology, Jazan University	2023 - 2024
Member of Interdisciplinary Program Committee, College of Computer Science and Information Technology, Jazan University	2023 - 2024

(Department Level):

Member of Computer Science Department Board, Jazan University	2023 - Present
Chair of Research and Innovation Committee, Department of Computer Science, Jazan University	2024 - Present
Chair of Learning Outcomes Committee, Department of Computer Science, Jazan University	2023 - 2024
Programming 1 Course Coordinator, Department of Computer Science, Jazan University	2023 - 2025
Artificial Neural Networks Course Coordinator, Department of Computer Science, Jazan University	2023 - Present
Member of Department of Computer Science Board, Jazan University	2013 - 2015
Member of Student Affairs Committee, Department of Computer Science, Jazan University	2013 - 2015

FUNDED GRANTS **Agency:** The Deanship of Graduate Studies and Scientific Research, Jazan University, Saudi Arabia, **Project Title:** Advancing Agricultural Sustainability and Food Safety: Integrating AI, IoT, and Computer Vision for Plant Disease Detection and Crop Quality Management, **PI:** Dr.Muhammad Mohzary, **Co-I:** Dr.Hani Alnami, **Amount:** 15,750.00 SR. (**Period:** 2024 - 2025)

Agency: The Deanship of Graduate Studies and Scientific Research, Jazan University, Saudi Arabia, **Project Title:** Smart Road Networks: Improving the Transportation System in KSA Through the use of Machine Learning, **PI:** Dr.Hani Alnami, **Co-I:** Dr.Muhammad Mohzary, **Amount:** 15,750.00 SR. (**Period:** 2024 - 2025)

Agency: The Deanship of Graduate Studies and Scientific Research, Jazan University, Saudi Arabia, **Project Title:** Smart Blockchain for Digital Currency Using Machine Learning, **PI:** Dr.Basem Ibrahim Assiri, **Co-I:** Dr.Muhammad Mohzary, Dr.Hani Alnami, and Dr.Hussein Zangoti, **Amount:** 15,750.00 SR. (**Period:** 2024 - 2025)

TRAINING AND CERTIFICATIONS

Administrative Leadership (القيادة الإداريه). Issued by the Institute of Public Administration (IPA). (April 2024)

Operational Planning (التخطيط التنفيذي). Issued by the Institute of Public Administration (IPA). (March 2024)

ELEVATIONLAB TECH VENTURE. Issued by the Missouri Small Business Development Center at UMKC, Kansas City, Missouri, USA. (April 2023)

BUSINESS ANALYTICS - MCIT PROGRAM. Issued by the Saudi Digital Academy. (December 2022)

Data-Driven Decision Making (DDDM) Specialization. Issued by the Saudi Authority for Data and Artificial Intelligence. (August 2022)

Blockchain Transformations of Financial Services. Issued by the European Institute of Business Administration (INSEAD). (March 2021)

Blockchain, Cryptoassets, and Decentralized Finance. Issued by the European Institute of Business Administration (INSEAD). (February 2021)

Blockchain for Financial Services. Issued by the European Institute of Business Administration (INSEAD). (January 2021)

HONORS AND AWARDS

Ayinala Award for Excellence in Research. Issued by the School of Science and Engineering, University of Missouri-Kansas City. (May 2023)

Comeback Kansas City Ventures Fellowship Fund. Issued by the Kansas City Digital Drive and the UMKC Innovation Center. (January 2023)

Tech Venture ELEVATION LAB Scholarship. Awarded by Missouri Small Business Development Center at University of Missouri-Kansas City. (January 2023)

IEEE ComSoc Student Travel Grant. Issued by the IEEE Communications Society. (January 2023)

UMKC Graduate Student Travel Grant. Issued by the School of Graduate Studies, University of Missouri-Kansas City. (December 2022)

Balaji Krithikaivasan Memorial Travel Scholarship. Issued by the Division of Computing, Analytics, and Mathematics, University of Missouri-Kansas City. (December 2022)

CANSec'22 National Science Foundation (NSF) Student Travel Grant. Issued by National Science Foundation (NSF) & the 15th Central Area Networking and Security Workshop (CANSec 2022). (October 2022)

Scholarship to Complete the Associate Cloud Engineer Certification Training Program. Awarded by the Saudi Data & Al Authority (SDAIA). (September 2022)

Scholarship to Complete the Business Analytics - MCIT Nanodegree Program. Awarded by the Saudi Digital Academy (SDA). (September 2022)

Scholarship to Complete the Data-Driven Decision Making (DDDM) Training Program. Awarded by the Saudi Data & AI Authority (SDAIA), Saudi Arabia. (July 2022)

Fund Award (Amount: $10,000). Awarded by AHOY TECH LTD. (April 2022)

1st Place, Internet of Things Applications for Smart Cities Bootcamp. Orgnaized by the Small & Medium Enterprises General Authority (Monsha'at), Saudi Arabia. (April 2022)

ACM MobiSys 2021 Student Travel Grant. Issued by the 19th ACM International Conference on Mobile Systems, Applications, and Services (MobiSys 2021). (June 2021)

IM 2021 National Science Foundation (NSF) Student Travel Grant. Issued by National Science Foundation (NSF) & the 17th IFIP/IEEE International Symposium on Integrated Network Management (IM 2021). (April 2021)

Scholarship to Study Blockchain Revolution in Financial Services at the European Institute of Business Administration (INSEAD). Awarded by Mohammed bin Salman Foundation (Misk), Saudi Arabia. (December 2020)

Higher Education Scholarship. Awarded by Jazan University & Ministry of Education, Saudi Arabia. (December 2014 - May 2023)

First Class Honours Degree in Computer Science. Awarded by Jazan University, Saudi Arabia. (January 2013)

The Outstanding Academic Achievement Award. Awarded by College of Computer Science & Information Technology, Jazan University, Saudi Arabia. (November 2009)

PUBLICATIONS

Alnami, H., **Mohzary, M.**, Assiri, B., Zangoti, H., (2025, February). *An Integrated Framework for Cryptocurrency Price Forecasting and Anomaly Detection Using Machine Learning*. In Proceedings of the Applied Sciences Journal.

Mohzary, M., E. Basunduwah, Choi, B. Y., Song, S. (2024, December). *READ-Fake: Reflection and Environment-Aware DeepFake Detection*. In Proceedings of the 2024 IEEE International Conference on Visual Communications and Image Processing (VCIP), Tokyo, Japan.

E. Basunduwah, **Mohzary, M.**, Choi, B. Y., Song, S. (2024, December). *AIM-CP: AI-Based Multi-Visual Components Analysis for Crowd Dynamics Prediction*. In Proceedings of the 2024 39th International Conference on Image and Vision Computing New Zealand (IVCNZ), Christchurch, New Zealand.

Mohzary, M., Choi, B. Y., Song, S. (2024, October). *A Trustworthy Authentication Against Visual Master Face Dictionary Attacks (Trauma)*. In Proceedings of the 2024 IEEE International Conference on Image Processing (ICIP 2024), Abu Dhabi, United Arab Emirates.

Mohzary, M., Almalki, K. J., Choi, B. Y., Song, S. (2022, December). *CHIEFS: Corneal-Specular Highlights Imaging for Enhancing Fake-Face Spotter*. In Proceedings of the 15th International Symposium on Foundations & Practice of Security (FPS

2022), Ottawa, Canada.

Mohzary, M., Almalki, K. J., Choi, B. Y., Song, S. (2022, October). *Apple in my Eyes (AIME) Liveness Detection for Mobile Security Using Corneal Specular Reflections.* In Proceedings of the IEEE Internet of Things Journal (IoT-J).

Mohzary, M., Almalki, K. J., Choi, B. Y., Song, S. (2023, January). *MobiDeep: Mobile DeepFake Detection through Machine Learning-based Corneal-Specular Backscattering.* In the Proceedings of IEEE Consumer Communications & Networking Conference (IEEE CCNC 2023), Las Vegas, NV, USA.

Almalki, K. J., **Mohzary, M.**, Choi, B. Y., Song, S., Chen, Y. (2021, December). *Crowd Safety Sensing (CroSS) for the Post Pandemic Era.* In 2021 IEEE Globecom Workshops (GC Wkshps) (pp. 1-6).

Almalki, K. J., **Mohzary, M.**, Choi, B. Y., Song, S., Chen, Y. (2021, September). *Mosaic: Modeling Safety Index in Crowd by Detecting Face Masks Against COVID-19 and Beyond.* In 2021 IEEE International Smart Cities Conference (ISC2) (pp. 1-7).

Mohzary, M., Almalki, K. J., Choi, B. Y., Song, S. (2021, June). *Your Eyes Show What Your Eyes See (Y-EYES): Challenge-Response Anti-Spoofing Method for Mobile Security Using Corneal Specular Reflections.* In Proceedings of the 1st Workshop on Security and Privacy for Mobile AI (pp. 25-30).

Mohzary, M., Almalki, K. J., Choi, B. Y., Song, S. (2021, June). *Apple in my Eyes (AIME) Liveness Detection for Mobile Security Using Corneal Specular Reflections.* In Proceedings of the 19th Annual International Conference on Mobile Systems, Applications, and Services (pp. 489-490).

Almalki, K. J., Song, S., **Mohzary, M.**, Choi, B. Y. (2021, May). *CATS: Crowd-based Alert and Tracing Services for Building a Safe Community Cluster Against COVID-19.* In 2021 IFIP/IEEE International Symposium on Integrated Network Management (IM) (pp. 697-701).

Mohzary, M., Tadisetty, S., Ghazinour, K. (2019, November). *A Privacy Protection Layer for Wearable Devices.* In International Symposium on Foundations and Practice of Security (pp. 363-370). Springer, Cham.

Mohzary, M. A. (2018). *A Privacy-Aware Wearable Framework.* (Master's Thesis, Kent State University).

ACADEMIC TALKS **READFake: Reflection and Environment-Aware DeepFake Detection**. In Proceedings of the 2024 IEEE International Conference on Visual Communications and Image Processing (VCIP), Tokyo, Japan. (December 2024)

A Trustworthy Authentication Against Visual Master Face Dictionary Attacks (Trauma). In Proceedings of the 2024 IEEE International Conference on Image Processing (ICIP 2024), Abu Dhabi, United Arab Emirates. (October 2024)

Mastering Image Classification with Keras and TensorFlow, Department of Computer Science, Jazan University. (January 2024)

MobiDeep: Mobile DeepFake Detection through Machine Learning-based Corneal-Specular Backscattering, in the Security, Privacy, and Content Protection

Session, the IEEE Consumer Communications & Networking Conference (IEEE CCNC 2023), Las Vegas, NV, USA. (January 2023)

Machine Learning-Based DeepFake Detection Through Corneal-Specular Highlights Images, the 15th Central Area Networking and Security Workshop (CANSec 2022) Hosted by Wichita State University, Wichita, KS. (October 2022)

Camouflaged Object Detection, the 2nd AI Seminar Hosted by the Trustworthy Systems and Software Research Lab, University of Missouri-Kansas City. (February 2022)

Images Feature Extraction & Classification Techniques, the 1st AI Seminar Hosted by the Trustworthy Systems and Software Research Lab, University of Missouri-Kansas City. (January 2022)

Your Eyes Show What Your Eyes See!, the 14th Central Area Networking & Security Workshop (CANSec 2021) Hosted by University of Missouri-Columbia. (November 2021)

Challenge-Response Anti-Spoofing Method for Mobile Security Using Corneal Specular Reflections, the 1st Workshop on Security & Privacy for Mobile AI (MAISP 2021), Co-located with ACM MobiSys 2021. (June 2021)

Twitter Abusive Behavior Identification Using Apache Spark Engine for Large-scale Data Analytics, School of Computing & Engineering, University of Missouri-Kansas City. (May 2020)

Detecting & Recognizing Human-Object Interactions, Computer Science Ph.D. Discipline Oral Presentation, School of Computing & Engineering, University of Missouri-Kansas City. (December 2019)

Introduction to Data Science, Northeast Ohio Research Education Medicine Alliance (NEOREMA) Internship Program Hosted by Kent State University. (July 2018)

The Spy on Your Wrist! Northeast Ohio Research Education Medicine Alliance (NEOREMA) Internship Program Hosted by Kent State University. (July 2018)

A Method to Overcome Influence Maximization: Identifying Influential Users in Twitter Based on Content of Tweets and Geographical Location, Department of Computer Science, Kent State University. (May 2017)

Keep Your Promise: Mechanism Design Against Free-Riding and False-Reporting in Crowd-sourcing, Department of Computer Science, Kent State University. (April 2017)

Predicting the Risk Factor of the Road Using Data Mining & Machine Learning Techniques, Department of Computer Science, Kent State University. (December 2016)

SERVICE &
LEADERSHIP

Leadership, Mentoring, and Community Outreach:

Co-organizing the IEEE International Conference on Image Processing (ICIP) 2024 workshop titled "The 1st Workshop on Intelligent Crowd Engineering (ICE)".

Abu Dhabi, UAE. (2024)

Organized a Workshop to Train Public School students in Jazan Province to Participate in The National Olympiad for Programming and Artificial Intelligence (ATHKA). Department of Education, Jazan, Saudi Arabia. (2024)

Member of the Advisory Committee at EduThon (The Education Hackathon). Umm Al-Qura University, Mecca, Saudi Arabia. (2024)

Volunteer at the International Conference on Learning Representations (ICLR) 2023. Kigali, Rwanda, Africa. (2023)

Judge at Missouri Technology Student Association (TSA) 2023 State Championships Conference. University of Central Missouri, Warrensburg, Missouri, USA. (2023)

Judge at Kansas City STEM Alliance's Annual PLTW Senior Showcase, Kansas City, Missouri, USA. (2023)

Graduate Mentor to Undergraduate Research Assistants Working on a NASA Sponsored Research Project at the Trustworthy Systems and Software Research Lab, University of Missouri-Kansas City. (2022)

Volunteer at the First Semester Experience Class Program for School of Computing & Engineering Students, University of Missouri-Kansas City. (2021)

Member of Saudi Cybersecurity for Children Association (CyberKids). (2021)

Graduate Mentor to High School Student Interns at the Advanced Information Security and Privacy (AISP) Lab, Kent State University. (2018)

Organized Two Workshops on Data Science & Privacy Enhancing Technologies at Northeast Ohio Research Education Medicine Alliance (NEOREMA) Internship Program for High School Students. (2018)

Volunteer at the Cultural & Social Affairs Committee in the Saudi Student Association at the University of South Florida. (2016)

Volunteer at the College of Computer Science & Information Technology Tutorship Program at Jazan University, Saudi Arabia. (2013)

Editorial Service:

(Reviewer):

Pattern Recognition Journal   2022 - Present

Scientific Reports Open Access Journal	2023 - Present
The Computers, Materials & Continua (CMC) Journal	2023
Journal of King Saud University - Computer and Information Sciences	2022
Computational and Structural Biotechnology Journal (CSBJ)	2022
IEEE International Conference on Computer Communications (IEEE INFOCOM 2022)	2021
IEEE International Conference on Computer Communications (IEEE INFOCOM 2021)	2020

TEACHING EXPERIENCE

Jazan University:

Data Mining (Semester-2 2023-24)

Data Science (Semester-1 2024-25)

Operating Systems (Semester-4 2023-24)

Artificial Neural Networks (Semester-2 2024-25, Semester-1 2024-25, Semester-3 2023-24, Semester-2 2023-24)

Introduction to Computing (Semester-1 2023-24, Semester-1 2024-25)

Programming-1 (Semester-1 2024-25, Semester-3p 2023-24, Semester-2 2023-24, Semester-1 2023, Fall 2013, Spring 2014, Fall 2014)

Programming-2 (Semester-1 2023-24, Spring 2014, Fall 2014)

Database Management System (Summer 2014)

Introduction to Information System (Spring 2014)

Software Engineering (Fall 2013)

Internet Technology. (Fall 2013)

University of Missouri-Kansas City:

Introduction to Statistical Learning (Lab). (Spring 2021, Fall 2021)

REFERENCES   **Sejun Song, Ph.D.**, Associate Professor, University of Missouri-Kansas City.

Email: `sjsong@umkc.edu`

Baek-Young Choi, Ph.D., Professor, University of Missouri-Kansas City.

Email: `choiby@umkc.edu`