

HUSSEIN ALY JAD, PHD

+201559237773 - Hussein.aligad@gmail.com

<https://www.linkedin.com/in/hussein-aly-jad-phd-78997165/>

PROFILE

I bring a comprehensive portfolio encompassing academic, research, entrepreneurial, and administrative expertise. I am an accomplished academic with extensive teaching experience at well-established and reputable higher education institutions. My research interests include Technology Design, Educational Technology, Cultural Heritage, and Data Encoding and Cryptography based on algebraic structures. In addition to teaching and research, I have substantial experience supervising projects in Information Technology and Cybersecurity, with a particular emphasis on integrating Human-Computer Interaction (HCI) principles. I have also led students in developing business-ready solutions through entrepreneurship camps, applying key project management tools. Furthermore, I have demonstrated strong leadership in academic innovation through a variety of institutional roles.

SCIENTIFIC PUBLICATIONS

- Design and Evaluation of an Interactive Smart Ambulance Operating System, Behaviour & Information Technology, Jad, H.A., Reem Yassir, underwriting
- Enhancing Women's Health Literacy Through Interactive and Social Digital Technologies, Jad, H.A., Abdelslam, Mohamed Hendawy, underwriting
- Bridging Human - Computer Interaction and Wireless Network Security: A User-Centered MTD-Based Anomaly Prevention Model, International Journal of Human-Computer Studies, Jad, H.A., Kashkoush, M.S., Abdelrahman Waleed, Mamdouh Ahmed, Submitted
- Human-Centered Design of a Collaborative Tablet-Based Game for Improving Early Writing Skills, Journal of Educational Technology Research and Development, Jad, H.A., Omar Khaled, Submitted
- Women's Health: A Contemporary Review of Challenges, Interventions, and Digital Innovations, Jad, H.A., Basma Abdelslam, Laila EL-Zimaity, Malak A.Zain, Leqaa EL-Hossiny, Mohamed Hendawy, Mohamed Atef, Mohamed Essam, Yahia Salah, Egyptian Journal of Health Sciences Technology, accepted for publish, 2025
- We play we learn: Exploring the value of digital educational games in Rural Egypt, Lazem, S., Jad, H.A., Conference on Human Factors in Computing Systems - Proceedings, 2017, 2017-May, pp. 2782-2791
- Hyper BCK-hashing algorithm: employing encoding system based on logical algebra in enhancing the secure hash algorithms, Jad, H.A., Mostafa, S.M., Naby, M.A.A., ...Kashkoush, M.S., Taha, A.A., Italian Journal of Pure and Applied Mathematics, 2023, 49, pp. 462-481
- Algorithm for encoding N-ary block codes by using the hyper function, Mostafa, S.M., Abd-Elnaby, M.A., Youssef, B.A.B., Jad, H.A., Advances in Mathematics: Scientific Journal, 2021, 10(1), pp. 339-351
- Efficient Algorithm for Constructing KU-algebras from Block Codes, Mostafa, S. M., B. A. B. Youssef, H. A. Jad, International Journal of Engineering Science Invention, 2016, 5(5), 32-43.
- Coding theory applied to KU-algebras, Mostafa, S. M., Youssef, B., Jad, H. A., Journal of New Theory, 2015, (6), 43-53.
- Intersectional (α, A) -soft new-Ideals In pu-algebras, Mostafa, S. M., Kareem, F. F., Jad, H. A., Journal of New Theory, 2016,(13), 38-48.
- Brief review of soft sets and its application in coding theory, Mostafa, S. M., KAREEM, F. F., Jad, H. A., Journal of New Theory, 2020, (33), 95-106

ACADEMIC & INNOVATION LEADERSHIP EXPERIENCE

Director, Technology and Innovation Support Center, City of Scientific Research and Technological Applications (SRTA - City) | 01/2022 – Present

- Provide guidance to researchers, faculty, and innovators on IP rights, patent filing, and protection strategies.
- Coordinate with the Egyptian Patent Office and WIPO for IP registration and capacity building.
- Identify commercially viable research outputs and support their transfer to industry.
- Facilitate licensing agreements, joint ventures, and startup creation based on innovations.
- Organize regular workshops, seminars, and training sessions on intellectual property rights, innovation management, and commercialization strategies

Head Coordinator of Projects, Health Information Technology Department, Faculty of Applied Health Science Technology, Borg Al-Arab Technological University (BATU) | 10/2024 – Present

- Guide students in selecting innovative, feasible, and interdisciplinary graduation project topics.
- Coordinate internal review panels and prepare selected projects for participation in national exhibitions, startup competitions, and academic conferences.
- Foster collaboration among students, faculty, industry experts, and healthcare institutions
- Develop standardized documentation templates, progress reporting tools, and comprehensive assessment rubrics.

Vice – Director, Entrepreneurship club, BATU | 10/2024 - Present

- Instruct students on conducting business ideas, market research, tailored Business Model Canvases, and feasibility studies to identify demand, competitive landscape, and user needs within the healthcare sector.
- Organise workshops, competitions, and mentorship programs to promote entrepreneurial thinking among students across all faculties.
- Collaborate with industry partners, incubators, and governmental initiatives to provide students with real-world exposure and startup support.
- Facilitate participation in national and international innovation events, hackathons, and startup accelerators.

Director, Training and Professional Development Center (TPDC), Faculty of Applied Health Science Technology, BATU | 10/2024 – Present

- Facilitate student internships, practical training, and job shadowing opportunities.
- Promote joint training programs with national and international organizations.
- Build partnerships with hospitals, healthcare facilities, pharmaceutical industries, and technology companies.
- Coordinate with academic departments and external experts to ensure relevant and up-to-date content.
- Provide technical assistance and mentorship for graduation projects and prototypes.
- Organize health Expos, hackathons, and innovation challenges.

MULTIDISCIPLINARY PROJECTS SUPERVISION

In collaboration with the **Faculty of Computers and Data Science, Alexandria University**, Through the academic year 2024-2025 and 2025-2026, I am supervising the following projects.

- **Montura**: Focuses on strengthening wireless network security by integrating machine learning and deep learning techniques with Moving Target Defense (MTD) strategies. The system proactively detects and mitigates threats in real time, dynamically adapting to emerging attack patterns.
- Develop automated security testing platforms for web and Android applications to ensure complete attack surface coverage and reduce manual effort, minimize missed vulnerabilities, and support efficient penetration testing. By consolidating fragmented tools and automating repetitive tasks, the platforms enhance assessment coverage and tester productivity.
- **EDR Offensive Breaker** is a simulation tool designed to avoid modern Endpoint Detection and Response (EDR) systems by simultaneously neutralizing user-land API hooking and Event Tracing for Windows (ETW). The tool employs advanced indirect system call techniques to evade API hooks and suppresses ETW visibility using offensive telemetry-evasion strategies.

In collaboration with the **College of Computing and Information Technology, Arab Academy for Science, Technology and Maritime Transport (AASTMT)**, Through the academic year 2025-2026, I am supervising the following projects.

- **Hear My Sign** is a mobile application that enables real-time communication between mute signers and non-signers, addressing the lack of interpreters in everyday environments. Sign movements captured during live video calls are translated into text or speech for non-signers.

In collaboration with **Health Information Technology, the Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU)**, through the academic year **2024-2025** and **2023-2024** I supervised the following projects:

- **ISIS (Women Health):** Mobile application focuses on developing a comprehensive women's health app empowers users with essential tools for tracking, managing, and improving their well-being with specific features such as mental health support, pregnancy guidance, , lifestyle recommendations, and access to expert consultations.
- **WellNet:** A health - focused social platform designed to connect breast cancer patients with others facing similar health challenges.
- **NutriBot (Health Nutrition):** The project involves developing a smart system that delivers a personalized treatment plan based on a combination of proper nutrition and vitamin supplements (in pill form), tailored to each user's specific needs according to their recorded health data.
- **DrugFocus:** Develop a digital platform that helps users reduce their medication costs by identifying the most affordable options containing the same active ingredients.
- **Smart Ambulance:** The project aimed to develop web application to facilitate road accident victims' reception and treatment process at hospitals.
- **Forsa:** A website to support individuals in the early and middle stages of addiction recovery.
- **Al-Rafik:**The project developed a website to simplify the process of selecting Companions for the elderly and individuals with special needs.
- **MediMap:** Website connects hospitals and provides with real-time information and statistics on the availability of beds in Intensive Care Units (ICUs) and Neonatal Intensive Care Units (NICUs).
- **Nurse Calling System (M3ak):** Digital nurse calling system that provides a more effective way for patients to request help from nursing staff.
- **Crowd Organizing Pathway:** Mobile advance booking application that allows patients to schedule their appointments in advance via their smartphones.
- **MECPHA:** Platform works on the inventory and collection of spare parts of manufacturing machines for pharmaceutical factories, medical supplies factories and cosmetics.

Collaborative research project in collaboration with Assoc. **Prof. Shaimaa Lazem, International Collaboration Officer at the Science, Technology & Innovation Funding Authority (STDF) & General Chair of Fifth African Conference on Human-Computer Interaction (AfriCHI)**, we accomplished the following projects.

- **The Hilali Network: Exploring Lived Cultural Heritage Through Design in Higher Education**, in partnership with **University of Kingston in London**, from April 2017 to October 2018.
The project funded by the Egyptian-English Partnership Program (Newton-Mosharafa).The Hilali Network project focused on integrating lived cultural heritage into higher education through innovative design approaches.

In collaboration with **Idea Space Company, Silicon Oasis, New Borg Al-Arab City, Alexandria**, Through the academic year **2023-2024**, I organized an Internship Program focused on User Experience (UX) design for the students of **Egypt-Japan University of Science and Technology (E-JUST)** and **Alexandria University** from Jan. 27 to Feb. 8, 2024. The key outcomes is the following project.

- **AI-Powered Educational Game for Enhancing Arabic Writing Skills in Elementary Students.** The project introduced an AI-powered educational game designed to enhance Arabic writing skills among elementary

school students. The game identifies and analyzes common writing errors using artificial intelligence, providing personalized feedback and adaptive exercises to address individual learning needs.

TRAINING & CAPACITY-BUILDING PROGRAMS

In collaboration with Assoc. Prof. Shaimaa Lazem, International Collaboration Officer at the Science, Technology & Innovation Funding Authority (STDF) & General Chair of Fifth African Conference on Human-Computer Interaction (AfriCHI), we organized the following schools.

- Fourth Training Summer School, University of Kingston in London and Newton-Musharafa program | 21 - 30 Aug 2017
The fourth training school in Human – Computer Interaction (HCI) was to train 18 students from Faculty of Engineering, Alexandria University as part of Hilali Network 's activities with University of Kingston in England that funded by the Newton-Musharafa program. The theme of training was to design applications for mobile phones enable members of the Bedouin community to document their non-traditional heritage of songs, poetry and traditions to preserve it from extinction.
- Third Training Winter School, SRTA-City | 29 Jan 2017 - 9 Feb 2017
The third training school in HCI was to train 35 students from the Faculty of Engineering, Alexandria University. The theme of training was to design technologies to serve multiple sectors of Egyptian society (academic researchers, farmers, students).
- Second Training Winter School, SRTA-City | 26 Jan 2014 - 10 Feb 2014
The second training school in the field of HCI was to train 31 students from Faculty of Engineering - Alexandria University. The theme of training was to design low-cost technologies to serve the health sector in Egyptian society.
- First Training Winter School, SRTA-City | 27 Jan 2013 – 7 Feb 2013
The first training school in the field of HCI was to train 52 students from Faculty of Engineering, Alexandria University. The theme of training was to design low-cost technologies to serve the educational sector in Egyptian society.
- Skill4Trends Student Training, Faculty of Applied Health Sciences Technology, | 16–27 February 2025
Organized a two-week training workshop for 24 students in collaboration with the Alexandria Businessmen Association and the Chamber of Commerce as part of the Skill4Trends initiative. The training aimed to support students in transforming their graduation projects into startups within the health technology sector, aligning their innovations with real market needs.
- Training on Innovative Graduation Projects in Health Sciences Technology | Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU) | 10 February 2025
keynote speaker on a large-scale workshop titled "Towards Innovative and Entrepreneurial Graduation Projects in Health Sciences Technology" with the participation of 380 students. The event aimed to inspire students to adopt innovation and entrepreneurship in their graduation projects, aligning their ideas with emerging trends in health technologies.
- AI Fundamentals for Health Applications | Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU) | February 2025
Organized and facilitated AI training sessions tailored to students of the Faculty of Applied Health Sciences Technology, focusing on the fundamentals of artificial intelligence and its applications in digital health innovation and diagnostics.

- Web Development for Health Informatics Projects | Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU) | February 2025
Organized web development courses aimed at empowering students to design and build user-centered, responsive health-related web platforms, integrating real-world project work aligned with healthcare needs.
- Mobile App Development in Healthcare Contexts | Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU) | February 2025
Oversaw the delivery of mobile development training, guiding students to create Android/iOS applications that address problems in health monitoring, patient communication, and digital health services.
- English for Academic and Professional Communication | Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University (BATU) | February 2025
Organized English language workshops designed to enhance students' communication skills in academic writing, presentation delivery, and professional interactions, with a focus on the health technology domain.
- Lecturer – Matrouh Children's University | February 7, 2023
Delivered an educational session as part of the national Children's University program organized by the Academy of Scientific Research and Technology (ASRT). The initiative targets children aged 9–15 across Egypt to foster early interest in science, research, and innovation, offering hands-on learning experiences within university settings.
- Training and Development Center, Ain Shams University | February 2021
Completed two professional development courses focused on:
 - Scientific Writing: Enhancing academic and research writing skills.
 - Scholarly Publishing: Understanding publication standards, peer review, and strategies for publishing in reputable journals.

COMPETITIONS & INNOVATION ENGAGEMENTS

- Third Scientific Research and Innovation Forum (Entelaga 3), Egyptian Space Agency | June 22, 2025
Participation of Students from the Faculty of Applied Health Sciences Technology in the at the Egyptian Space Agency, alongside representatives from 11 universities and technological institutes across the Arab Republic of Egypt.
- Gen. Start. Vol.2 competition, Egypt-Japan University of Science and Technology (E-JUST) | March 23, 2025
Thirty-eight students from the Faculty of Applied Health Sciences Technology participated in the activities of the Gen. Start. Vol.2 competition, organized by the IEEE E-JUST team at the Egypt-Japan University of Science and Technology (E-JUST), in collaboration with Alamein International University.
- Competition of 2nd International Conference on Technological Education | April 8-10, 2025
Twenty-four students from the Faculty of Applied Health Sciences Technology participated in the competition held as part of the 2nd International Conference on Technological Education, which took place at the Royal Kempinski Hotel – New Cairo.
- Entrepreneurship Rally, Academy of Scientific Research and Technology (ASRT) | Dec 8, 2024
Twenty-six students from the Faculty of Applied Health Sciences Technology participated in the Entrepreneurship Rally, organized by the Academy of Scientific Research and Technology (ASRT) across Egyptian universities, with student teams achieving notable success in the competition. The MECFA team from the faculty successfully qualified for the finals
- “It’s a time to be an entrepreneur” Competition, SRTA-City | March 7-8, 2023

In cooperation with the Academy of Scientific Research and Technology and the company of Mentors' Business community for development and entrepreneurship, I participated in organizing the competition that was an opportunity to acquire the necessary skills and experience to launch emerging projects through practical ideas from research and prototypes.

- IRI Hackathon 2020 Competition, University of Kingston in London | Jan 2020 - Feb 2020

The competition targeted students from computer sciences/engineering backgrounds and engineering and information technology students.

The main objectives: -

- Development of a culture heritage mobile application
- Practice hands on experience in mobile apps programming tools
- Direct graduates towards startups and small business.
- Present examples and success stories to encourage youth.

JUDGING & REVIEW ROLES IN COMPETITIONS AND INNOVATION EVENTS

- Reviewer – ITC-Egypt 2025, Egyptian Military Academy| 28–31 July 2025

Served as a project reviewer at the International Telecommunication Conference (ITC-Egypt 2025), held at the Egyptian Military Academy in the New Capital, Cairo. Evaluated innovative student and research projects aligned with cutting-edge trends in communications technologies, as part of a high-level technical program featuring international experts, industry panels, and emerging technology tracks.

- Head of Judging Committee – Entrepreneurship Projects, RoboRAVE Egypt 2025, Egypt-Japan University of Science and Technology (E-JUST) | 4–5 July 2025

Led the evaluation panel for entrepreneurship-focused student projects during RoboRAVE Egypt 2025. Oversaw the judging process, coordinated with industry experts and academic evaluators, and ensured fair, criteria-based assessment of innovative solutions presented by competing teams.

- Judge – Maker Fair Track, IEEE YESIST12, Arab Academy for Science, Technology and Maritime Transport (AASTMT) | 8–9 May 2025

Served as a judge for the Maker Fair Track at IEEE YESIST12 (Youth Endeavors for Social Innovation Using Sustainable Technology). The event provided a global platform for students and young professionals to present innovative, tech-based solutions to pressing humanitarian and social challenges. Assessed projects based on creativity, social impact, and alignment with ethical, service-oriented engineering principles.

- Head of Judging Committee – Second Applied Health Sciences Forum Competition in Arab Republic of Egypt, Borg Al-Arab Technological University | 4–10 May 2025

Served as the Head of the Judging Committee for the Second Applied Health Sciences Forum Competition, held at Tolip Golden Plaza Hotel – Heliopolis, Cairo. The forum was held under the theme of "Towards Future Visions for Educational Tourism and the Internationalization of the Technological Health Sector." The event brought together leading technological and scientific universities, including 6th of October Technological University, Assiut Technological University, Misr University for Science and Technology, and Beni Suef University. Among the forum's highlights was the signing of several Memoranda of Understanding (MoUs) between the Faculty of Applied Health Sciences Technology, Borg Al-Arab Technological University, and a number of international universities, aiming to strengthen academic and research collaboration and open new pathways for cross-border education.

- Judge – GEN Start Vol. 2 Pitching Competition, IEEE Region 8 Entrepreneurship Week, New Borg Al Arab Technology Park | 25 February 2025

Served as a judge for student-led innovation projects at GEN Start Vol. 2, as part of IEEE Region 8 Entrepreneurship Week in Egypt-Japan University of Science and Technology (E-JUST). Evaluated startup pitches based on creativity, feasibility, and entrepreneurial potential. The event aimed to promote an entrepreneurial mindset among students and provided a platform for showcasing impactful, tech-driven ideas.

- **Judge – STEM Borg El Arab School Projects (ISEF Preparation) | Academic Year 2024-2025 & 2023-2024**

Served as a judge for student research projects at STEM Borg El Arab School, as part of the preparation for the International Science and Engineering Fair (ISEF). Evaluated innovative student projects to select top candidates for representing the school in this prestigious global competition.

- **Judge – Entrepreneurship Bootcamp: Idea Generation, Green Innovation & Design Thinking, Entrepreneurship Club (E-Club) at Borg Al-Arab Technological University | 20-28 April 2025**

Served as a judge during the final pitching session of the Entrepreneurship Bootcamp. The camp trained 171 students in green innovation, idea generation, and design thinking, with contributions from entrepreneurship and innovation experts. Judged final presentations from 16 student teams from Borg Al-Arab Technological University and Alexandria University, evaluating the viability and creativity of early-stage entrepreneurial projects.

- **Head of Judging Committee – RoboRAVE Egypt 2024, Salahaldin International School (SIS) | 8 June 2024**

Served as Head of the Judging Committee for the RoboRAVE Egypt 2024 competition. Oversaw the evaluation of student-designed robots presented in an international competitive setting that promotes innovation, hands-on learning, teamwork, and creativity among participants from Egypt and abroad.

- **Judge – Robofest Competition 2023, Lawrence Technological University (hosted at Schutz American School) | May 2023**

Served as a judge for the Robofest 2023 competition, organized by Lawrence Technological University. Evaluated student projects involving autonomous robots designed and programmed by participants. The event focused on promoting STEAM education and computer science (including AI), while encouraging creativity, problem-solving, and teamwork among students through an inclusive and engaging platform.

- **Head of Judging Committee – RoboRAVE Egypt 2023, SRTA-City | 9 February 2023**

Served as Head of the Judging Committee for RoboRAVE Egypt 2023. This marked Egypt as the 15th country to host the global RoboRAVE competition. Oversaw the evaluation of student-designed robots across five challenge categories, including a newly introduced track for individuals with determination, promoting inclusivity in STEM. Assessed projects from participants aged 4 to 20, emphasizing innovation, teamwork, and hands-on learning in robotics.

AWARDS

- **RoboRAVE Egypt 2025, Egypt-Japan University of Science and Technology (E-JUST) | July 4–5, 2025**

Outstanding Participation of Students from the Faculty of Applied Health Sciences Technology in the RoboRAVE Egypt 2025 competition, held at E-JUST. The event was honored by the presence of H.E. Mrs. Leonora Rueda Gutiérrez, Ambassador of Mexico to Egypt, Dr. Chen Zhengrong, Director of RoboRAVE China, and Eng. Reem Radwan, Director of RoboRAVE Egypt.

- **First Place:** Team **BurnaCure** from the Pharmaceutical Production Technology program, awarded a cash prize of 5,000 EGP.
- **Second Place:** Team **NeuroBed** from the Healthcare Technology program, awarded a cash prize of 3,000 EGP.

- Third Place: Team ISIS from the Health Informatics Technology program, awarded a cash prize of 2,000 EGP.

The winning teams have been officially qualified to compete in the international finals scheduled to take place in China on August 25, 2025.

- **IEEE-YESIST12_2025 competition, Arab Academy for Science, Technology & Maritime Transport (AASTMT) | May 8–9, 2025**

Participated in IEEE-YESIST12_2025 competition at the Arab Academy for Science, Technology & Maritime Transport (AASTMT) with four teams from the faculty of Applied Health Science Technology at BATU. Team ISIS achieved **Second Place in the Special Track** and **qualified for the international finals in Malaysia**, scheduled for August 2025, under the auspices of the IEEE Global Organization.

- **Startup Olympics 2024, Innovators Support Fund (ISF) | January 17, 2025**

Participated in the Startup Olympics, an initiative supporting university students in Egypt in innovation and entrepreneurship. The event served as a gateway to the **GEN Z** Program Competition, where the **Smart Ambulance** team from the faculty of Applied Health Science Technology at BATU was awarded **EGP 600,000** and granted access to university hospitals for project implementation.

- **Entrepreneurship and Innovation Bootcamp, BATU | May 14, 2025**

Participated in the Entrepreneurship and Innovation Bootcamp held at Borg El Arab Technological University, competing among 171 students from Alexandria University and BATU. The **MEDIHUB** team, faculty of Applied Health Science Technology at BATU, **won First Place and a cash prize of EGP 5,000**.

- **Applied Health Sciences Forum Projects Competition, BATU | May 7, 2025**

Participated in the competition with 6 teams from the Faculty of Applied Health Sciences Technology. Among 22 graduation projects from prestigious universities—including October Technological University, New Assiut Technological University, Misr University for Science and Technology, and Beni Suef University - **two teams** from our faculty achieved **First and Second Place**.

- **Arab Youth Forum of Entrepreneurship, Institute of Graduate Studies and Research, Alexandria University | December 16, 2024**

Participated in the Arab Youth Forum for Entrepreneurship, held at the Institute of Graduate Studies and Research, Alexandria University, where the graduation project "Al-Rafik" won **Third Place**.

ACADEMIC AND PROFESSIONAL CONFERENCES & EXPOS

- **Head Organizer in collaboration of Prof. Shaimaa Lazem – General Chair, Conference of AfriCHI2025, AASTMT, Smart Village Campus | November 2025**

AfriCHI aims to explore how African cultural perspectives, knowledge, and technological originality can shape the future of HCI under the theme “Re-centering African Wisdom in HCI”. It is the 5th Biennial African Human-Computer Interaction Conference that brings together researchers, practitioners, students, and industry professionals in Human-Computer Interaction (HCI), UX, interaction design, and related fields to advance technology design and innovation across Africa.

- **Head Organizer, HEALTH TECH EXPO 2025, Faculty of Applied Health Sciences | July 13, 2025**

The Expo showcased the graduation projects of our talented students and highlighted the year-long achievements and innovations developed across the college. We were delighted to welcome students from AASTMT, Alexandria University, Pharos University Misr University for Science and Technology, and STEM Schools, whose participation enriched the event. In the presence of prominent leaders from the industrial

sector including Simulator Egypt, Smart Scientific Solutions, A.G. Global, Charisma Quality Solutions, and H-Logic Security Technology

- **Keynote Speaker – International Conference of the Patent Contact Office in Agriculture & Food Security National Research Centre (NRC), Egypt | October 29–31, 2024**

Delivered a keynote address at an international conference organized by the NRC Patent Office, under the patronage of the Egyptian Ministries of Higher Education, Environment, and Scientific Research. The conference focused on advancing innovation, intellectual property, and green technologies to enhance food security, foster agricultural entrepreneurship, and support collaboration between academia, research centers, and industry.

- **Attendee – 9th Annual International Conference, Ain Shams University, Cairo, Egypt | April 2021**

Participated in Ain Shams University's 9th Annual International Conference, focusing on multidisciplinary advancements in education, research, and innovation.

- **Attendee – WIPO Global TISC Conference Online | November 29 – December 1, 2021**

Participated in the WIPO Global Technology and Innovation Support Centers (TISC) Conference, co-organized with the National Intellectual Property Administration of China (CNIPA). The conference focused on the role of TISCs in advancing technology transfer and delivering innovation-driven solutions to global socio-economic challenges. Sessions featured expert discussions on best practices, IP management, patent analytics, and community impact.

PROFESSIONAL AND ACADEMIC WORKSHOPS

World Intellectual Property Organization (WIPO)

- **Series of workshops about the Project of Upgrading Technology Transfer Offices in Egypt | March – July 2023**

Participated in a national project supporting the development of innovation ecosystems through the enhancement of Technology Transfer Offices in selected Egyptian academic and research institutions.

- Webinar: **Chemical Searches in PATENTSCOPE | May 2022**

- **International Workshop: Capacity Building in IP Rights and Geographical Indications | Nov 2020**

Organized in collaboration with the National Intellectual Property Academy and the Egyptian Patent Office.

Technology Innovation Commercialization Office (TICO), SRTA-City

- Keynote Speaker: **"Patents and Innovation Stimulation" | Oct 24, 2022**

Delivered a lecture on intellectual property, focusing on patent criteria and their role in innovation.

- **Design Thinking Bootcamp | Dec 25–29, 2022**

- **Design Thinking & Entrepreneurship – From Problem to Business Idea | Nov 29 – Dec 2, 2022**

University of Kingston, United Kingdom | 15 Nov 2017

- **Self-Documentation for Intangible Cultural Heritage: From Smart Phone Applications to Cloud Computing**

I participated in organizing the workshop to gather specialists from Egyptian and foreign universities in the fields of Intangible Cultural Heritage Documentation and Computer Engineering & Information Technology Companies to help the competent authorities for documenting CH electronically with the participation of Bedouin community.

Egyptian Patent Office

- **Introduction to Patents | Sep 2018**

- **Patent Grant Procedures and Skills | Feb 2014**

Responsible Science Center

- **How to Get a Scholarship? | Jan 2017**

Arid Lands Cultivation Research Institute (ALCRI), SRTA-City

- Towards a Good Research | Jan 2017
- Research Ethics: Basics and Principles | Mar 2016
- Data Analysis and Modeling Using CoStat Software | Dec 2014

Misr El Kheir Foundation

- Programs and Grants Supporting Scientific Research | Nov 29, 2022

INSTITUTIONAL COMMITTEES AND ADVISORY ROLES

Member – Website and Mobile App Development Committee, City of Scientific Research and Technological Applications (SRTA-City)

Participated as a committee member overseeing the development of the official website and mobile application of SRTA-City. Responsibilities included content planning, enhancing user experience, and ensuring that the technologies aligned with the city's research and technological objectives.

Member – Data Documentation Committee, SRTA-City

Contributed as part of a specialized committee focused on documenting research and administrative data for SRTA-City. Efforts aimed at ensuring accuracy, accessibility of information, and supporting data-driven decision-making.

Member – Entrepreneurship Club, SRTA-City

Actively participated in the Entrepreneurship Club's initiatives to promote a culture of innovation and entrepreneurial skill development. Involved in organizing events, workshops, and competitions to help transform creative ideas into practical projects.

Member – Services and Training Council, Borg Al-Arab Technological University (BATU)

Contributed to formulating policies and plans related to student services and training programs. Supported initiatives that enhance students' professional skills and bridge the gap between education and labor market needs through workshops, development initiatives, and industry-partnered training programs.

Member – Faculty Council, Faculty of Applied Health Sciences Technology, BATU

Participated in academic policy discussions and strategic planning for the faculty. Involved in curriculum development, educational program enhancement, and improving the quality of teaching and training in the field of health sciences technology.

ONLINE ACADEMIC AND PROFESSIONAL PROFILES

Google Scholar: <https://scholar.google.com/citations?user=yRcAJzgAAAAJ&hl=en>

Scopus Author Profile: <https://www.scopus.com/authid/detail.uri?authorId=57201449379>

LinkedIn: <https://www.linkedin.com/in/hussein-aly-jad-phd-78997165/>

ResearchGate: <https://www.researchgate.net/profile/Hussein-Jad>

ACADEMIC QUALIFICATIONS

Doctor of Philosophy (Ph.D.) in Mathematics, Ain Shams University, Egypt

Department of Mathematics | Conferred: April 13, 2022

Thesis Title: Emerging Research Trends and Algorithms in Studying Coding Theory and Algebraic Structures

Master of Science (M.Sc.) in Mathematics, Ain Shams University, Egypt

Department of Mathematics | Conferred: January 12, 2017

Thesis Title: Codes and Some Results Based on Algebraic Structures

Bachelor of Science (B.Sc.) in Mathematics and Computer Science, Beni-Suef University, Egypt

RECOMMENDATIONS

1- Shaimaa Lazem, PhD

- Associate Research Professor, Informatics Research Institute, City of Scientific Research and Technological Applications, Alexandria, Egypt
- General Chair, Fifth African Conference on Human-Computer Interaction (**AfriCHI**)
- International Collaboration Officer at the Science, Technology & Innovation Funding Authority, Egypt (STDF)
- Cofounder of **@ArabHCI**
- Founding member, Iota Delta Rho Interdisciplinary Research Honor Society
- Email: shaimaalazem@gmail.com (or just "Contact available upon request")

2- Bayumy Abdelrahman, PhD

- Professor and **Dean** of Informatics Research Institute, City of Scientific Research and Technological Applications, Alexandria, Egypt
- Email: bbayumy@gmail.com (or just "Contact available upon request")

3- Mohamed Essam Khalifa, PhD

- Professor of Mathematics and Computer, Computers and Information Faculty, Ain Shams University, Egypt
- Scientific Advisor, Egyptian-Chinese University
- Former Vice President of the Egyptian-Chinese University for Graduate Studies and Research
- Former Dean of Computers and Information Faculty, Ain Shams University, Egypt
- Email: esskhalifa@cis.asu.edu.eg (or just "Contact available upon request")

4- Samy Mohamed Mostafa, PhD

- Professor of Mathematics, Faculty of Education, Ain Shams University, Egypt
 - Email: samymostafa@yahoo.com (or just "Contact available upon request")
-