

## 2021-2024 Achievements by year

### 2021-2022 Achievements

In summer 2021, Nahrein Network Co-Director Dr Rozhen Mohammed-Amin and team members reconstituted their Kurdish Cultural Heritage Network project (based at the Digital Cultural Heritage Research Center (DCH) at Sulaimani Polytechnic University) as an NGO, named Cultural Heritage Organization (CHO). CHO addresses the need for digital cultural heritage research and practice in Iraq, through three Work Packages (WP).

- **Research & Development in Digital Heritage and Impact Assessment:** This WP involves utilizing Augmented Reality (AR) and Virtual Reality (VR) technologies for designing, developing, and evaluating interactive and empathy eliciting digital experiences for deepening engagement with local heritage (including difficult heritage). Outputs included community outreach and impact assessments of mobile AR apps like [“Talk to Sarai” mobile AR](#) project and [“Feel Like Me” mobile AR](#) project (with initial fund from the Minority Rights Group International that deliver immersive, emotive and empathetic responses to aspects of Iraq’s ‘difficult’ heritage, from the Mandate-era Sarai Building in the Kurdistan Region of Iraq to the Yazidi genocide of 2014. During 2021-2022, four papers ([two journal papers](#), a [conference paper](#) and a [book chapter](#)) have also been (co)authored by Rozhen and CHO team members.
- **Local Capacity Building:** CHO and its Digital Cultural Heritage (DCH) Research Center partner (based at Sulaimani Polytechnic University) organized and delivered four bi-lingual online workshops (totalling 10 hours) with a total of 1047 attendance from 17 countries (12 cities and 10 towns within Iraq), training cultural heritage professionals and scholars from museums, libraries, NGOs, and universities. During 2021-2022, CHO and DCH also organized and delivered five in-person training activities/workshops (over 19 hours in total with a total of 390 attendees) and three team capacity building workshops and a course (totalling 9:30 hours). Records of some of these capacity building activities can be found in CHO’s [YouTube Channel](#).

Between October 2021 and September 2022, Rozhen was invited to and delivered 12 capacity building lectures and seminars, and provided heritage and research consultations to various local, USA, UK, and European institutions.

- **Community Outreach:** CHO and DCH (co)organized or participated in seven community outreach activities (74.5 hours in total) in Sulaimani and Erbil cities with a total of 5250 attendance. During these events, local stakeholders, community members, and even international visitors engaged with and interacted with CHO and DCH's digital heritage projects. CHO and DCH's innovative digital projects were also invited for display by major tech events in Sulaimani and Erbil like TECHFEST 2021 and HITEX 2022.
- **Media & Publicity:** The growing interest in CHO and DCH's cutting edge interdisciplinary digital heritage research projects and activities led to 12 media interviews and features by a total of 11 local and popular media, including NRT TV, K24, and KNN.



## 2022-2023 Achievements

In 2022-2023, after moving from DCH at Sulaimani Polytechnic University to the Kurdistan Institution for Strategic Studies & Scientific Research (KISSR), Nahrein Network Co-Director

Dr Rozhen Mohammed-Amin continued to work on her three Work Packages through CHO and KISSR. The following are a summary of the outputs:

- **Research & Development in Digital Heritage and Impact Assessment:** Rozhen and her CHO-KISSR team developed “Virtual Sarai” project, a VR version of “Talk to Sarai” mobile AR project. They also launched and continued the promotion of the [“Feel Like Me” mobile AR](#) project through online and in-person campaigns to collect users’ feedback and impact data. During this funding year, the CHO team received funding from Central Zagros Archaeological/HESDIK Project from University of Reading to develop and evaluate [AR & VR Ecotourism experiences](#) for Slemani Museum’s Pre-History Gallery. Additionally, CHO’s developer (Karo Kameran Rasool) and his colleague have been [awarded the top prize in the Artificial Intelligence category](#) in a technology festival in Sulaimani. Rozhen’s 2021 invited presentation in an online symposium from University of Pennsylvania led to authoring a peer reviewed chapter in a forthcoming ISAW Open Access volume entitled “Monumentality in Space and Thought: Case Studies from Ancient Iraq and Iran”.
- **Local Capacity Building:** the CHO-KISSR team, in partnership with local academic institutions, co-organized and delivered two in-person training activities/workshops and a panel, reaching 498 faculty, staff, students, and community members in the cities of Sulaimani and Duhok in the Kurdistan Region of Iraq. Rozhen also directed the organization of a training workshop (totalling six hours) on independent learning and decision making for enhancing junior team members’ leadership and management skills. The CHO and KISSR team (with the support of local and international collaborators) also completed the extensive planning for launching the Digital Heritage Internship Program (DHIP). The team then announced, shortlisted, and selected the first cohort of interns, and started the program in September 2023. In the first month of the program, the team organized and managed the delivery of a total of nine training and peer-learning sessions (totalling around 26.5 hours) in a range of introductory topics such as interdisciplinary thinking and projects, team building, self and independent learning, communication, designing thinking , and applications and underlying technologies of AR and VR technologies. Of those, four of the training sessions (totalling 16 hours) were delivered by Rozhen.

Between October 2022 and September 2023, Rozhen was invited to speak in 11 local and international events (webinar, festival, workshop, seminar, panel, and conference) in the Kurdistan Region of Iraq (Sulaimani, Erbil, and Chamchamal cities) and UK. Rozhen and her team also undertook over 30 networking and consultancy meetings with various local and international heritage stakeholders (in person and online), in and outside academia. The team has become a credible and reliable “go to” team for supporting local academic

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and heritage institutions and NGOs on research and heritage capacity building, grant management, and innovative heritage projects. Rozhen was also nominated to and participated in the International Visitor Leadership Program (IVLP) from the USA Department of State as part of a program titled “Protecting Cultural Heritage through Innovation”, which involved a total of 27 meetings and visits to 23 key cultural heritage institutions and universities across four states in the USA.

- **Community Outreach:** Rozhen and her CHO-KISSR team organized, co-organized, and participated in 21 community outreach activities (around 114.5 hours), reaching 3,873 community members in Sulaimani and Erbil. The office of CHO (based at the Culture Factory), where the digital heritage projects are exhibited, also received a total of 237 local and international visitors (including academics, journalists, students, government officials, NGOs, companies, and high-profile advisors and diplomats) from Iraq, UK, US, South Korea, and Germany. In addition to largely overwhelming positive feedback and high engagement from the projects’ users, the CHO-KISSR team has witnessed a surge in the number of requests from individuals, organizations, and educational institutions for collaboration in new similar projects and media coverage, far beyond what the team can handle. The team’s digital heritage projects have been in high demand for showcasing in key local cultural and technological events and festivals such as Sulaimani Day Festivals, TECHEST, and HITEXT in Sulaimani and Erbil. Growing local requests and invitations for displaying the projects to more children and youth in schools and universities led to the launch of CHO-KISSR’s university/school tour program. In the 2022-2023 funding cycle, Rozhen and her team received a total of 17 invitations for meetings, roundtable sessions, and events related to cultural heritage and tech-based entrepreneurship and start-up discussions.
- **Media & Publicity:** During the 2022-2023 funding cycle, the number of local and international media/social media interviews and features of CHO-KISSR team’s projects and activities quadrupled (from 12 interviews/features in 2021-2022 to 48 interviews/features in 2022-2023). Among the list of 32 small and popular TV and radio channels, Dijlah TV (one of the most-watched news channels in Iraq, based in Jordan) also reached out and featured CHO-KISSR’s digital heritage projects in a report. The team also observed a large increase in engagement with CHO’s social media channels in the 2022-2023 funding cycle.



**21**  
**Community Outreach**

**114.5 Hours**



**1**  
**Panel**

**3 Hours**



**1**  
**Team Capacity Building**

**6 Hours**



**2**  
**In-Person Training (4.5 Hours)**

**9**  
**Internship Training (26.5 Hours)**



**1**  
**Publication**



**48**  
**Interviews & Features**



**237**  
**Office Visitors**



**3**  
**VR & AR Projects**



**16**  
**Partnerships**



**17**  
**Invitations**



**1**  
**Formal Appreciation**



**11**  
**Invited Talks & Other**

## 2023-2024 Achievements

During the 2023-2024 funding cycle, Dr Rozhen Mohammed-Amin and her CHO-KISSR team continued to work on her three Work Packages through CHO and KISSR. The following are a summary of the outputs:

- **Research & Development in Digital Heritage and Impact Assessment:**

In collaboration with international collaborators (Prof. Maria Economou and Dr. Akrivi Katifori), Rozhen and her CHO-KISSR team developed and submitted a research paper titled “Nobody’s Listening: Evaluating the Impact of Immersive VR for Engaging with Difficult Heritage and

Human Rights”. The paper was built on a [2021 assessment](#) of the (2022) award winning [Nobody’s Listening \(NL\)](#) VR experience by Rozhen and her international collaborators and team members with a fund from USAID and UN IOM, in-kind contribution from the Nahrein Network/AHRC to Rozhen’s Co-I research at the Digital Cultural Heritage Research Center (Sulaimani Polytechnic) in 2020-2021, and partnership of Nobody’s Listening Project, Yazda, and UNESCO Chair on Genocide Prevention Studies in the Islamic World at the University of Baghdad. The comprehensive assessment involved quantitative and qualitative data collection from 127 local users of the Yazidi-genocide VR experience across five cities in the Kurdistan Region and the rest of Iraq. During this funding cycle, Rozhen and her team also started working on the data analysis of two additional research papers they had collected data for in the previous funding cycles: One on public perception on and engagement with the Slemani Museum (Iraq’s 2nd largest archaeology museum) and another on the state of digitization and digitalization in local museums in the Kurdistan Region of Iraq. In the last two months of this funding cycle, with her team, Rozhen also planned a comprehensive evaluation of their well-received pilot Digital Heritage Internship Program (DHIP).

- **Local Capacity Building:**

During this funding cycle, Rozhen and her team were extensively involved in managing and delivering their first project-based [Digital Heritage Internship Program \(DHIP\)](#). Over a span of 10 months, the intensive program trained 15 graduates (10 women and 5 men) in Sulaimani city from a total of 12 disciplines within Engineering, Design, Social Science, Arts, and Humanities, and IT. In the first six months of the program, the program delivered a total of 33 sessions (totalling about 98 hours) of structured training sessions (in-person or online) by local and international trainers. The hands-on training was accompanied by work sessions as well as in-person and remote consultations in team or individually. In addition to local capacity building, the program resulted in four capstone group projects (two mobile AR and two VR) by the interns that were developed in close consultation and collaboration with related stakeholders and under the supervision of Rozhen and her team. The co-creation and community-centered approach of the projects enabled the interns to be involved in real problem solving and also connect digital heritage with a range of global and local challenges and needs such as environmental pollution, women empowerment, human rights, and education advocacy. The interns’ projects were announced to the public during a well-attended closing ceremony in July 2024, attended by the Sulaimani Governor. In addition to extensive local media coverage, high public interests, verbal and written positive reactions, the nature and quality of the projects led to inviting Rozhen and her team for new projects and collaborations by local and international stakeholders from various sectors and related fields. During and after the closing ceremony, the CHO-KISSR team received formal appreciation from [two](#) well-known local NGOs and stakeholders for successful delivery of DHIP and its outputs such as capstone projects. The team also observed an exponential increase in the number of invitations for showcasing their and their interns’ new digital heritage projects in more academic institutions, schools, and events including high profile events such as the 1st Scientific Forum on Yazidi

Genocide at the University of Sulaimani where prominent government officials and public figures used and positively reacted to the team's "Feel Like Me" project.

In addition to the internship program, Rozhen and CHO-KISSR team members co-organized and co-delivered a panel on immersive technologies for genocide education in collaboration with Yazda, Upstream, and National Museum Amnasuraka, a fund from the US Consulate General in Erbil, and an in-kind support of the Nahrein Network. The panel was followed by a demo session where the "Nobody's Listening" VR and "Feel Like Me" mobile AR projects were displayed and engaged over 40 attendees, including a judge, academics, and journalists.

During this funding cycle, among a total of 32 other various activities, Rozhen was invited to deliver training and talks or serve as a jury member in a total of 19 local and international events. Her talks included two international keynote speeches in a [conference](#) from the University of Glasgow (UK) and a [webinar](#) from the University of Arizona (USA) as well as a guest speaking at the USA's Smithsonian Youth STEM Exchange program and another guest lecturing at the Human Rights Practice Program from the University of Arizona. Her research and academic grant related training spanned across three cities within the Kurdistan Region of Iraq (Sulaimani, Erbil, and Duhok) and a range of stakeholders and institutions. Beyond numbers and positive reactions, some of these talks and engagements resulted in or created pathways for invitations to new projects, collaborations, and team visibility. Additionally, two CHO-KISSR team members were invited to facilitate and serve a jury in an international competition from Germany involving local students and early-career professionals.

In 2023-2024, CHO-KISSR team members' management and leadership capacity building continued through high level involvement of the members in the announcement, recruitment, and management steps of the Digital Heritage Internship Program (DHIP) and reflection sessions. Additionally, some team members received training in human resource management, proposal writing, and grant application writing.

- **Community Outreach:**

In 2023-2024, the number of invitations by local stakeholders for hosting and displaying Rozhen and her CHO-KISSR team's projects continued to increase exponentially. Despite the DHIP management and capstone projects' supervisions, the team accepted participation in and (co) organized a total of 10 well-attended community outreach activities and school tours. The outreach



activities engaged a total of 1913 community members from different age groups and backgrounds in Sulaimani and Erbil cities with the team's digital heritage projects.

During this funding cycle the office of CHO at the Culture Factory welcomed and engaged a total of 269 local and international visitors with the CHO-KISSR team and interns' projects. The visitors included school and university students, academics, journalists, tourists, government officials, local and international NGO representatives, media personnel, professionals from both the public and private sectors, artists, advocates, influencers, parliament members, and international diplomats from Iraq, Germany, South Korea, and the Netherlands. Also, Rozhen and her CHO-KISSR team received a total of 16 invitations to attend or participate in various cultural and technical activities and events organized by different local stakeholders from the heritage, technology, and education sectors. They have also been approached for providing support and consultations to various local heritage stakeholders and professionals as well as local and international heritage academics and researchers. A growing number of students and local graduates reached out to the team to volunteer or participate in their events.

- **Media & Publicity:**

During this funding cycle, Rozhen and her CHO-KISSR team and (later) interns' projects and activities were interviewed or featured 26 times by a total of 10 media/social media pages. Some of the interviews/features attracted the other ones or inspired new stakeholders or volunteers to approach the CHO-KISSR for using the digital heritage projects or discuss new projects/involvements. The team's experience and projects also became the case study of two reports by two university students as part of their assignments.



10  
Community  
Outreach  
(38 Hours)



1  
Panel  
(6.5 Hours)



1  
Publication &  
5  
In-progress Research



33  
Internship Training  
(98 Hours)



26  
Interviews &  
Features



269  
Office Visitors



4  
VR & AR Projects



10  
Partnerships



16  
Invitations



2  
Formal  
Appreciation



32  
Invited Talks  
& Others