

Integrating Religion, Faith, and Spirituality in HCI

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ABSTRACT

HCI scholarship has not yet fully engaged with faith, religion, and spirituality, even though billions of people around the world are associated with such traditions and belief systems. While a few papers and workshops at CHI have focused on particular religions, broader discussions around religion, interfaith relationships, and computing have been absent from mainstream HCI design concerns. In this workshop, we propose to bring together HCI scholars and practitioners, whose work is associated with various faiths, religions, and spiritual practices to start this important conversation, with a focus on three questions: (a) does secularization in computing marginalize faith-based values? and if so, how? (b) how can HCI design address the unique needs and values of faith-based communities? and (c) how can scholarship and practice in HCI benefit from the integration of faith, religion, and spirituality? We hope to form an HCI community of scholars and practitioners focused on the intersection of faith/spirituality/religion and computing.

KEYWORDS

faith, spirituality, religion

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1 INTRODUCTION

As of 2021, about 85% of people around the world subscribe to organized religions [22]. Besides religious rituals, the sensibilities and values of religious communities create social practices and shape the culture in various contexts, including how the communities see, adopt, and use technologies [6, 7]. However, HCI thus far has engaged with religion only marginally. Technology hitherto seems largely an expression of secular impulses – efficiency, profit, scale, enjoyment, and convenience. We have started recognizing the limits of such secular approaches to the design of technologies [5, 10, 16, 27], as well as the harm they can do. A reexamination of what faith, religion, and spirituality provide could open the path to more meaningful ways to engage (or not) with technology.

In recent times, HCI has made significant progress in diversifying its theories, methods, and concepts to encompass various geographical contexts, cultures, and communities. One line of such research has begun to consider religion when addressing core issues in HCI, such as development [23], healthcare [17, 26], market systems and cultures [14], sustainability [25], agency [21], privacy [1, 24], communications [33], meditative practices [12], among others. This line of work challenges some traditional assumptions of HCI interventions, and extends HCI’s reach to accommodate communities whose faith, religion, and spiritual practices are central to who they are. Another line of research deepens our understanding of how

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religious communities are using technologies to observe rituals and accommodate socio-religious practices [19, 31]. Such scholarship demonstrates how faith/religious/spiritual values impact the use, adoption, and appropriation of technologies.

While existing scholarship focuses on particular faiths/religions/spiritual practices and their influence on technology, they miss some broader sociotechnical implications and adversarial politics resulting from such encounters. The goal of this workshop is to foreground these aspects in the design of human-computer interactions. We do this by asking three broad questions:

- (a) Does secularization in computing marginalize faith-based values, and if so, how?
- (b) How can HCI design address the unique needs and values of faith-based communities?
- (c) How can scholarship and practice in HCI benefit through the integration of faith, religion, and spirituality?

We hope to form an HCI community of scholars and practitioners focused on the intersection of spirituality/religion and computing.

The first workshop on religion and HCI was organized at CHI 2020 [16] and was focused on surfacing the core issues involved when designing technologies for Muslim communities. The workshop was well-received, with 12 accepted papers and more than 50 participants. This proposal is a response to the feedback we received at that workshop, in which participants suggested that we broaden the scope of such workshops in the future to be more inclusive of other faiths, religions, and spiritual traditions.

2 WORKSHOP GOALS AND THEMES

2.1 Secularization and Computing

Contemporary computational systems and artifacts predominantly assume secular users, or at the least, engage with people without explicit or implicit reference to any faith. This notion is probably inherited from a Euro-centric, scientific tradition that values scientific evidence over faith/religious/spiritual reasoning [29]. In addition, the dominance of scientific epistemology in research communities like those of HCI sidelines religion/spirituality [25]. As a result, secular logic, metaphors, languages, and reasonings explicitly or implicitly shape the design, thinking, discourses, theories, concepts, analysis, and solutions to many computational problems. Genevieve Bell has recognized such preclusion of religious and spiritual practices from technological infrastructure – particularly in Ubicomp – and made an urgent call to design technologies not only for secular life but also for spiritual life [4].

Faith-based communities, meanwhile, appropriate technologies for their own use [32], make partial use of technologies or abandon technologies altogether [24], misinterpret technology features [23], or hold hostile attitudes towards technologies in general [23]. For example, what is perceived as a lack of Islamic values in popular social media and video sharing platforms has led many Muslims around the world to avoid using social media and video sharing platforms for the fear and uncertainty of exposure to prohibited content [24]. Many Orthodox Jews have similar dynamics with technology, particularly social media, while others find themselves hacking and adapting technology to meet their religious needs [30]. Wyche and her colleagues have reported smaller churches raising

concerns regarding the adoption of technologies like projectors by megachurches that seek to cater to gatherings greater than 2000 people, arguing that such large gatherings are incompatible with the sense of community desired within the Christian faith [34].

The issues above arise partly from secular terminologies in computing (e.g., sustainability [25]) that direct the motivations, values, and goals of computational systems. Religiously-oriented HCI researchers are frequently left with the task of reinterpreting these terms within a religiously-informed framework in order to challenge the assumptions and implications of these secular views. Religious traditions, however, are replete with their own unique values and concepts (e.g., “interbeing” from Buddhism [20], “the mechanical heart-mind” from Taoism [35], “theosis” from Christianity [9]) that could offer computational researchers and designers new ways to approach their work. Engaging with concepts and values from different religious traditions might benefit HCI in engaging deeply with religious communities and to fundamentally rethink design goals more broadly.

One of our workshop goals is to explore with our participants how the focus on secular values in the technology industry marginalizes faith-based communities. We aim to make technologies more inclusive of alternative rationalities beyond the secular, to expand the technologies’ reach and scope to faith-based communities, and to challenge existing secular frameworks that center “value-free” goals.

2.2 Addressing the Unique Needs and Values of Faith-based Communities

HCI scholars have explored techno-spiritual designs—ICTs that assist in advancing spirituality—for faith-based communities to support their rituals, community collaboration, and religious-institution-based services. Some examples include the use of technologies for spiritual formation [33], televangelism [15], making prayer calls [31], home automation [30], orchestrating festivities [14], religious institutional donation collection [23], praying about events in the world [8], and technology use by spiritual “gurus” to form national narratives around social welfare and development [13]. The advent of social media and video-sharing platforms have brought more opportunities for techno-spiritual practices for faith-based communities.

Through this workshop, we engage with techno-spiritual practices from two perspectives. First, we aim to explore how HCI can help faith-based communities by designing novel technologies to observe the communities’ rituals and conduct other faith-based activities. Second, we hope to engage with the moral, social, and political implications of such techno-spiritual practices to see how they can benefit HCI. Beyond exploring faith-based communities’ unique needs and designing for them, we are also concerned with contemporary events where social media platforms are used to spread faith-based intolerance, misinformation, and violence (see [3, 18], for example). We hope to discuss ways to mitigate such adverse implications of techno-spiritual practices through design-based practices and policies.

2.3 Integrating Faith, Religion, and Spirituality in HCI

There have been several efforts in HCI to integrate religious values in different HCI domains, including development, healthcare, sustainability, privacy, politics, among others. For example, HCI has thus far focused on micro-economic rationality to design for changing habits for sustainability. On the contrary, many religious communities depart from economic rationality and build sustainable habits drawing from their religious practices, education, and community norms [25]. Such an insight calls HCI's attention to broadly engaging with the rhetoric of sustainability that might not be best explained with the "modern" and "rational" understanding of sustainability. A similar departure of religious practices from secular values is shown in a recent study of privacy in HCI [24]. Most of existing HCI research treats privacy based on its pragmatic "practical demand", assuming privacy as an individualistic value (see the claim of Abokhodair et al. [1]) where individuals are supposed to act rationally [2] in the "marketplace", maximizing social interests in resolving conflicting values. Contrary to pragmatism, many religious communities primarily construct the notion of privacy based on holy texts and community norms. As a result, the community's norms of sharing technologies, peer-surveillance, and other privacy norms depart from Western pragmatic values and focus on faith-based practices [24]. Such scholarship challenges Western, neoliberal, pragmatic, and micro-economic priorities for designing technologies and suggests ways for including faith/religious/spiritual values to broaden the scope of research and practice within diverse HCI domains.

By centering faith/religious/spiritual values in the design of HCI, this workshop will help facilitate conversations about theories, methods, models, and modes of analysis that can bridge the gap between scientific and religious values in HCI. Expanding HCI methods and modes of analysis to include religious sensitivities, practices, and values provides inclusivity and focalizes marginalized forms of expression. For example, in cases of gender-based violence, religious agency—where actions are taken to adhere to a transcendental power (i.e., one's God)—, and pursuing patience based on risk calculations within abusive situations, are both forms of agency that are dismissed when seen through the lens of secular feminism [11, 21]. On the other hand, technologies sometimes amplify faith-based inequalities and marginalization. For example, as opposed to the popular belief that technologies may help overcome inequalities rooted in faith-based traditions (such as caste-systems in India), the inequalities are further amplified through social media [28].

By excluding values and practices of mass populations, we are limiting the reach of design and contributing to the status quo of gender, political voice, social faith-based inequality, and religious marginalization. In this workshop, we aim to explore how diverse religious traditions and practices all around the world may enrich HCI's understanding of faith, religious, and spiritual traditions and potentially expand design thinking for these communities.

3 ORGANIZERS

The organizers in this proposal come from different religious, contextual, and career backgrounds. All of the organizing members

have conducted research related to religiosity, spirituality, and occult practices. We have collective experiences of organizing CHI workshops.

Mohammad Rashidujjaman Rifat (primary contact) is a Ph.D. candidate in the Department of Computer Science at the University of Toronto. His research is at the intersection of HCI, ICTD, and faith. Rifat conducts qualitative studies and computational analysis to explore faith-based values, rationality, and politics; and designs technologies to mitigate faith-based intolerance and make technologies more faith inclusive.

Firaz Peer is an Assistant Professor at University of Kentucky's School of Information Science. He is interested in studying issues of accountability, justice, care, and equity that manifest when building, using, and maintaining algorithmic and data infrastructures for marginalized communities.

Hawra Rabaan is a Ph.D. Candidate at Indiana University-Purdue University Indianapolis (IUPUI), School of Informatics and Computing. Her work lies at the intersection of religion, social work, and HCI, with a focus on exploring socio-technical practices and design for countering domestic violence in non-Western contexts using Islamic feminism and justice theories.

Nusrat Jahan Mim is a Doctor of Design Candidate at the Graduate School of Design, Harvard University. Her work draws upon cutting-edge critical literature in Urban Design Politics around Faith and Informalities and addresses the contemporary struggles of marginalized communities within the globalized projects of modernization, urbanization, and digitization.

Maryam Mustafa is an Assistant Professor at the Lahore University of Management Sciences in Pakistan. Her areas of research and teaching are HCI and ICT4D. She earned her Ph.D. from the Technical University of Braunschweig in Germany. Mustafa's current area of research focuses on the gendered design of technologies to promote equitable access for women in Pakistan. She has been working to understand design for maternal health, mental health, and connectedness within patriarchal, low-income, low-literate communities in Pakistan.

Kentaro Toyama is the W. K. Kellogg Professor of Community Information at University of Michigan School of Information; fellow of the Dalai Lama Center for Ethics and Transformative Values at MIT; author of *Geek Heresy: Rescuing Social Change from the Cult of Technology*. He has conducted faith-related research in Bangladesh, India, Pakistan, and the United States.

Robert Markum is a Ph.D. Candidate at the University of Michigan, School of Information. His previous work in this area examined the effects of digital technology use on meditative and contemplative practices and transcendent experiences. More broadly, his work is centered on understanding digital existence and human-computer interaction from existential, phenomenological, and ethical perspectives.

Elizabeth Buie Elizabeth is a Senior User Experience Consultant at Nexer Digital Ltd, a user experience agency in the UK. She completed her Ph.D. in 2018 at Northumbria University, Newcastle upon Tyne, with a thesis titled "Exploring Techno-Spirituality: Design Strategies for Transcendent User Experience". For her Ph.D. she developed a grounded theory of transcendent user experiences and devised a design game and new forms of design fiction to develop and elaborate ideas for technologies aimed at facilitating such

experiences. She continues to explore the use of design fiction in this area.

Jessica Hammer is the Thomas and Lydia Moran Associate Professor of Learning Science, jointly appointed in the HCI Institute and the Entertainment Technology Center at Carnegie Mellon University. Her research focuses on three core areas: transformational games, educational technology for project-based learning, and inclusive innovation in design.

Sharifa Sultana is a Ph.D. Candidate at Cornell University, USA and a Facebook Fellow. Her research focuses on the rural Bangladeshi population. She is interested in understanding how religious, spiritual and faith-based practices connect to the wellbeing of people in rural Bangladesh and other similar communities, and how technology plays a role in this.

Samar Sabie is a Ph.D. candidate in Information Science at Cornell University, working at the intersection of critical participatory design (CPD) and science and technology studies (STS). Her work investigates the role design as a social and material practice can play in mediating the spatial politics of intercultural, interclass, interfaith, and intergenerational differences in urban contexts.

Syed Ishtiaque Ahmed is an Assistant Professor of Computer Science at University of Toronto. He conducts research in the intersection between Human-Computer Interaction (HCI) and Information and Communication Technology and Development (ICTD). He received his Ph.D. in Information Science from Cornell University in 2017. He established the first HCI research lab in Bangladesh in 2009, and still maintains it. His research work is built around the concept of 'voice' that connects various branches of political philosophy to technology intervention. His current research focuses on the politics of faith and justification in computing.

4 WEBSITE

The link to the website is <https://sites.google.com/view/faithchi>. We have prepared the website with the call for participation, information about attendance, and the workshop agenda on or before December 16, 2021.

5 PRE WORKSHOP PLANS

We hope to invite participants from various faiths, religions, spiritual traditions, educational backgrounds, and interests, both inside and outside the field of HCI. We will distribute the call for participation via relevant professional mailing lists and publicize the workshop through appropriate social media outlets and personal connections with various research communities (e.g. HCI4D, ethics in computing, critical issues in South Asia). In addition, we will invite religious leaders and policymakers from different traditions to participate in this workshop.

Participants will be asked to submit position papers (<6 pages long in the ACM Master Article Template) relevant to the workshop themes. The organizing team will review all submissions in relation to their fit with the workshop goals and contribution to thematic discussions. All accepted papers and presentations will be made available on the workshop website. We will complement this with channels in our Slack workspace where participants can engage in discussions asynchronously. We hope to recruit 25-30 participants for the workshop.

The workshop structure	
Time	Activity
9:00 - 9:10	Welcome and Introduction
9:10 - 10:00	Opening keynote
10:00 - 10:30	Coffee break
10:30 - 12:00	Brainstorming Session
12:00 - 13:00	Lunch Break
13:00 - 13:30	Group Presentation 1
13:30 - 14:00	Group Presentation 2
14:00 - 14:30	Group Presentation 3
14:30 - 15:00	Break
15:00 - 15:40	Closing keynote
15:40 - 16:00	Closing remarks

Table 1: The workshop structure.

6 PRE-WORKSHOP DOCUMENTS

We would like to encourage participants to learn about each other's work before the conference. With this idea in mind, we will ask all participants to record 5-minute videos of their presentations with closed captions (for accessibility) and send them to us. We will upload these videos to our Slack workspace and invite participants to engage with each other asynchronously. This will help introduce participants to each other's work and prime them for discussions during the workshop.

7 THE WORKSHOP DAY

In planning this schedule, we assume that we will be engaging in a hybrid format, where some organizers and participants will be in person and others will be remote. Table 1 charts the day-long activities for the workshop. We will start the workshop with introductory remarks from the organizers and a keynote presentation. Following the keynote session, organizers and participants will break into three groups to discuss ideas related to the three themes described above. The organizers will come prepared with questions, materials (markers, post-it notes, flip charts etc.), and online collaboration tools (Miro, Slido etc.) to support these discussions. The organizers will use available features on online collaborative tools (for example, switch access on Miro, screen reader with Slido) to make the workshop accessible for the participants with accessibility needs. Each group will then present their key discussion points back to the other participants. We will end the workshop with a closing keynote and a discussion about next steps.

8 POST WORKSHOP PLANS

We plan on communicating our ideas to a diverse audience. All papers and presentations from the workshop will continue to be hosted on our workshop website for the benefit of anyone interested in reviewing these materials later. For the CHI audience, we will disseminate the key ideas and thoughts from the workshop in the form of a dialogue in the ACM Interactions magazine (we have a commitment from the editors for this). We will communicate our ideas to specific communities based on their faith/religious/spiritual inclination. We will also invite participants to join our email list so we can continue the conversation.

9 CALL FOR PARTICIPATION

Despite the prominence of religion, faith, and spirituality in people's lives worldwide, HCI thus far has engaged with these only marginally. In our interactive hybrid workshop, we will reexamine what faith, religion, and spirituality could provide to more meaningful ways to engage (or not) with technology. Participants, in thematic clusters, will create a collective vision for future HCI research domains that will essentially integrate faith/spirituality in design conversations. We invite researchers and practitioners interested in the intersection of faith and technology to submit position papers under the following themes:

- **Secularization and Computing:** How secularization in computing marginalizes, misfits, or conflicts with faith-based values.
- **Designing for Faith-based Communities:** How can HCI design address the unique needs and values of faith-based communities?
- **Integrating Faith/Spirituality in HCI Domains:** How can scholarship and practice in HCI benefit through the integration of faith, religion, and spirituality?

Submission Details:

- Submission deadline: February 24, 2022
- Final notification of acceptance: March 10, 2022
- Page limit: 6 pages (including references).
- Template: ACM Master Article Submission Templates, single column (<https://chi2022.acm.org/for-authors/presenting/papers/chi-publication-formats/>).
- Selection criteria: Contribution to workshop's themes, quality of presentation, and potential to stimulate discussions.
- Submission: Email to faithchiworkshop@gmail.com with the subject line "CHI 2022 Workshop".
- NB: Upon acceptance, at least one author must attend the workshop, prepare a three-minute long video presentation, and register for the workshop and at least one day of the conference. Accepted papers will be archived on the workshop's website.
- Website: <https://sites.google.com/view/faithchi>

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