The Research Foundation for SUNY - Center for Technology in Government, University at Albany

Project Justification

We are submitting an applied research project proposal titled "Empowering Communities: Public Libraries, Civic Engagement and Artificial Intelligence" to the National Leadership Grants for Libraries program. It falls under strategic goal 2 (build the capacity of libraries and archives to lead and contribute to efforts that improve community well-being and strengthen civic engagement) and objective 2.2 (develop or enhance collaborations between libraries and stakeholders, and leverage opportunities to address community needs). It is submitted by the Center for Technology in Government at the University at Albany (CTG UAlbany) in partnership with the Urban Libraries Council. The project aims to understand the role of public libraries in fostering inclusive civic engagement in all aspects of Artificial Intelligence (AI). Three research questions guide the study: 1) what role may public libraries play in increasing knowledge about AI in the community?, 2) how may public libraries foster inclusive civic engagement in all aspects of AI?, and 3) what are the opportunities, threats, benefits, and challenges of public libraries leading inclusive civic engagement in all aspects of AI? The project, with a total budget of \$619,962, will produce four case studies, one comprehensive report, and one Practitioners' Guide. In today's digitized world, the pervasive presence of AI, systems that display intelligent behavior by analyzing their environment and taking actions - with some degree of autonomy- to achieve specific goals (EC, 2019), has urged discussions on its societal and ethical implications. Despite the increasing use of AI to, for example, populate newsfeeds, verify eligibility for social welfare, and predict the likelihood of crimes in neighborhoods, there are serious concerns that AI systems perpetuate structural inequalities, thereby harming marginalized communities¹ (Crawford and Whittaker, 2016). Although scholars and practitioners prescribe public engagement in AI to identify potential harms and better address community needs (Ada Lovelace Institute et al.2021; Ulnicane et al, 2022; UNESCO 2021), there is an absence of a clear strategy to engage communities in AI as well as of inclusive spaces where this engagement may take place (Wilson, 2022).

Based on a review of the current literature and CTG UAlbany's research on the role of public libraries in smart communities (e.g., Mersand et al, 2019; Yerden et al, 2019), we argue that public libraries are trusted learning spaces and community partners that may lead inclusive civic engagement in all aspects of AI, from design to deployment and eventually governance and evaluation. Over the years, public libraries have evolved to incorporate the needs of the digital age, and are now optimally placed to shape and lead inclusive civic engagement in AI to address the needs of the community. First, public libraries are at the forefront of ensuring digital equity and inclusion (Public Library Association, 2020). Most libraries not only offer access to technological infrastructure but also promote digital literacy through STEM and makerspace programs. Second, public libraries provide safe space to marginalized communities and assist them in learning new skills and accessing government services (Shen, 2013). Third, public libraries provide spaces of collaboration where multiple stakeholders share resources and actively engage with public local issues (Gasco-Hernandez et al., 2022).

Existing features of public libraries can be leveraged to foster inclusive civic engagement in all aspects of AI. Some public libraries are already offering programs aimed to raise awareness about AI among the public. It is the case of the AI Maker Kits in Frisco Library, the humanoid robots in Roanoke and Palo Alto libraries, and the coding classes in the Berkeley Public Library. However, most of these programs focus on technological aspects instead of societal implications and ethical considerations (Urban Libraries Council, 2019). Further, these programs do not explicitly address how the engagement of citizens and stakeholders in all aspects of AI may take place nor how this engagement may particularly benefit marginalized communities.

Thus, our proposed research project builds on the idea that public libraries have the capacity to serve as catalysts that contribute to improving community well-being and strengthening inclusive civic engagement in all aspects of AI.

Project Work Plan

We propose a three-year applied research project. During this timeframe we will conduct the following activities:

- 1. **Mapping exercise** (six months): To effectively identify and assess the role of public libraries in raising awareness about AI and fostering inclusive civic engagement, we will start reviewing public documents, library websites, and databases to map the existing AI programs offered by public libraries. Among others, the following questions will guide our mapping process: 1) what are the main types of AI programs offered in public libraries?, 2) what is the purpose of the AI programs and who are the intended users?, and 3) what are the main components of the AI programs?
- 2. Case studies (18 months): We will identify four urban public libraries for in-depth study that are already offering AI programs, based on the following criteria: region within the US, type of AI program, socioeconomic background, racial diversity, and research access. Our current knowledge already points to the inclusion of Frisco Public Library (TX) and Queens Public Library (NY), which will be confirmed after the mapping exercise. The mapping exercise will also allow us to identify the rest of the case studies. We will

¹ Marginalized communities include people of color, immigrants, people with disabilities, and LGBTQ+ groups.

The Research Foundation for SUNY - Center for Technology in Government, University at Albany

follow a multi-method approach for data collection to gather different perspectives from various stakeholders in each community.

- *Interviews*: We will conduct between ten and 15 interviews in each community with library staff and community stakeholders to 1) learn about the AI programs in the library and the community, 2) identify the key issues in deploying AI in the community, and 3) explore civic engagement strategies and processes in all aspects of AI.
- *Survey*: We will conduct a survey of residents to collect information on 1) current levels of knowledge about AI, 2) experience engaging with community stakeholders in all aspects of AI, and 3) willingness to participate in AI programs in public libraries. The survey will help us understand the community needs and identify potential strategies to initiate meaningful engagement. We will pre-test the survey instrument to ensure the clarity of the questionnaire.
- *Focus group discussion*: We will invite a small group of survey respondents to participate in focus group discussions to analyze the answers to the survey in-depth.
- 3. **Reports and Practitioners' Guide** (eight months): We will produce four case studies, a comprehensive report and a Practitioners' Guide. Each case study will provide community-specific findings from the data collection activities in public libraries and their communities. The comprehensive report will focus on the current landscape of AI programs in public libraries featuring different approaches to increase AI awareness and discuss the role of libraries in fostering inclusive civic engagement in all aspects of AI. In addition, we will produce a Practitioners' Guide for community stakeholders, and in particular for government agencies, libraries, and community organizations to provide practical support in designing inclusive civic engagement activities in all aspects of AI. Among others, the Practitioners' Guide will include information on 1) mechanisms of participation 2) benefits of engaging communities 3) challenges in civic engagement and 4) risks of involving citizens. We will host two **workshops**, one for library staff and government agencies to get feedback on the Practitioners' Guide, and revise it accordingly and a second one with small, rural, and tribal libraries to ensure transferability to various contexts.
- 4. **Dissemination** (four months): Dissemination activities will take place throughout the funding period, through practitioner-oriented conferences and academic publications with a national and international outreach. We also plan to use online social media platforms to disseminate findings using videos and podcasts as well as a dedicated project website. Lastly, we will end the project with a half-day public event. The event will be held remotely to maximize involvement of participants, enable broad diffusion of project's results, increase the potential for impact on practice, and invite libraries studied as part of the research to present their experiences.

In all the activities, the research team will be supported by the expertise of an Advisory Board, who will provide strategic advice for the multiple stages and activities of the project. It will be composed of librarians and leading experts in the field of AI and civic engagement with technologies.

Diversity Plan

Marginalized communities are often not represented in the design and implementation of new technology. That is why our project is focused on finding a trusted space these communities to voice their concerns and find support to engage in all aspects of AI. Therefore, our project will 1) include libraries that serve diverse communities and will place specific emphasis in engaging individuals with diverse socio-economic, racial, and cultural backgrounds, including black, indigenous, people of color, and/or immigrants, 2) design interview questions that target the issues of inclusion in civic engagement, and 3) identify specific civic engagement concerns of marginalized communities.

Project Results

Our project will produce four case studies, a comprehensive report and one Practitioners' Guide, which will provide strategies and practical tools to design and develop a space for communities to voice their concerns on AI and find support to engage with local stakeholders. The products will be previously validated and will be useful to other public libraries and stakeholders. To sustain the results of the project beyond the funding period, we will rely on the active community of libraries established through our previous IMLS-funded projects as well as on the Urban Libraries Council's network. Our research will also contribute to emerging discussions in information studies, science and technology studies, and public administration on civic/public engagement in AI. **Budget**

Total funding request of <u>\$619,962</u>. This includes: 1) Salary support for two faculty as PI and co-PI, and a project manager, at <u>\$82,728</u>; 2) Fringe benefits for professional staff <u>\$52,421</u>; 3) Travel for field work visits and domestic and international conferences, at <u>\$37,458</u>; 4) Supplies and materials: focus groups and transcription costs at <u>\$8,757</u>; 5) Student support: one graduate student (one annual year, one summer for all three years \$71,613), fringe benefits \$9,310; tuition for one student for all three years, at <u>\$55,800</u>; 6) Other Costs: focus groups incentives, contracting fees and advisory board stipends of <u>\$98,200</u>; 7) Direct costs: <u>\$416,287</u>; (8) RF SUNY indirect costs of \$203,675, at 56.5% for 2023-24, 2024-25, and 2025-26 calculated on modified direct cost base of <u>\$360,487</u>.