

‘100 People’ Community Art Augmented Reality Project

Project Description - Overview

In the preceding decade, the renowned local artist Watie White has been crafting 100 Omaha community murals featuring local nonprofit leaders who serve a social justice mission. These beneficiaries include small business owners, fellow artists, activists, and other community advocates. He has dubbed this cultural endeavor the ‘100 People Project (Public Art – 100 people).’

Figure 1 - Six Examples of 100 People Project Portraits



Watie White’s art is well received by the public, however, the individual message that each installation conveys is lacking. We found that mere signage does not provide a sense of presence and personality Mr. White intends for his audience.

Augmented reality (AR) provides a visual medium in which the user can better understand the world Watie’s art subjects inhabit. Using AR as a medium is more likely to invoke emotion when telling the story behind each portrait (Pavlik et al., 2013). This is a way to provide Watie’s subjects to tell their story, spread their message, and widen their cultural reach.

Project Description

The proposed software solution would function as follows. When the user happens to enter a neighborhood where a portrait is located, they receive a notification. Later they open the notification linking to an augmented reality view. When the device is pointed towards a portrait several key features are highlighted. One particular portrait features a proud figure holding a sign labeled ‘IMMIGRANT.’ This sign is highlighted, prompting the user to press it. A video is then displayed on the sign, telling his story first-hand. In another portrait, the user taps the musical instrument highlighted in the portrait and music can be heard. There are a multitude of other possibilities in which the user might connect with the individual featured in a piece.

The application will be developed for iOS and Android via the Flutter framework. ARCore will serve as the framework for Android augmented reality, and ARKit will do the same for iOS. Each installation will feature a QR code linking to the Google Play and the Apple App Store. I have independently prototyped with said frameworks and verified their feasibility. Refer to the appendix for a diagram outlying the proposed software architecture.

Project Description - Timeline

Table 1 - Production Timeline

Sprint	Deliverable	Showcase Event	Deadline
1	A single augmented reality use-case to demo the concept on campus.	100 People UNO Campus Installation	January 17, 2020
2	Geolocation implementation (notifications for nearby portraits) is added. Augmented reality content is added to the existing art installations.	N/A	May 1 2020
3	Augmented reality content is added for the remaining (~50) art installations. Any reported bugs are patched.	Kaneko Watie White Show	September 2020 (Showcase date has not been announced)
4	Any remaining bugs are patched.	Creative Activity Fair (Required for FUSE)	March 2021 (Showcase date has not been announced)

Project Description - Student/Faculty Mentor Roles

Table 2 - Responsibilities

Individual	Role	Tasks
Adam Hahn	Student	<ul style="list-style-type: none">• Development of the application according to the production timeline above• Showcasing the application• Reporting on the project at the Creative Activity Fair, following the development process
Dr. Deepak Khazanchi	FUSE Mentor	<ul style="list-style-type: none">• Overseeing development and research progress on a weekly basis• Providing a workspace, devices for testing, and a means to publish on the Apple App Store and Google Play Store
Watie White	Client	<ul style="list-style-type: none">• Collecting and curating 'storytelling' media• Critiquing the application from an artistic, cultural, and clientele perspective• Providing a platform to showcase the project (ie 100 People UNO Campus Installation, Kaneko Watie White Show)

Project Description - Previous Internal Funding

I have not received any funding specific to this project.

Budget and Budget Justification

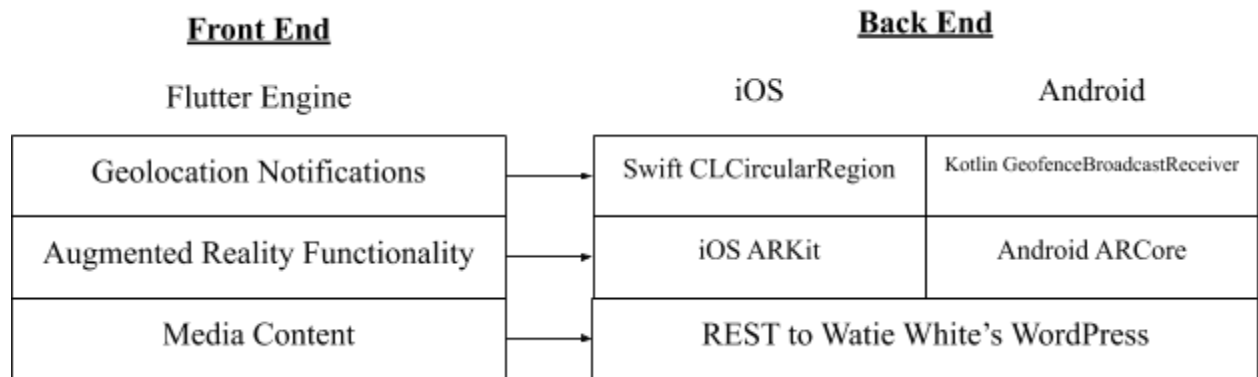
I am requesting \$2400 to complete this project.

Table 3 - Budget

Partition	Justification
\$400	Salary for 40 hours for Sprint 1 (\$10/hour)
\$600	Salary for 60 hours for Sprint 2 (\$10/hour)
\$500	Salary for 50 hours for Sprint 3 (\$10/hour)
\$500	Salary for 50 hours for Sprint 4 (\$10/hour)
\$400	Cost to cover an iOS device for testing. The IST Attic Lab does not have any iOS devices.

Appendix

Figure 2 - Software Architecture



Works Cited

Pavlik, J. V., & Bridges, F. (2013). The emergence of augmented reality (AR) as a storytelling medium in journalism. *Journalism & Communication Monographs*, 15(1), 4-59.

Public Art – 100 people. (n.d.). Retrieved from <https://watiewwhite.com/public/>.



UNIVERSITY OF NEBRASKA AT OMAHA

COLLEGE OF INFORMATION SCIENCE & TECHNOLOGY

SUBJECT: FUSE Proposal: Adam Hahn “‘100 People’ Community Art Augmented Reality Project”

DATE: December 15, 2019

Dear FUSE Committee:

I am pleased to write this letter in support of Adam Hahn’s FUSE proposal “100 People Community Art Augmented Reality Project”. Watie White is a painter, printmaker and public artists based in Omaha, Nebraska. For the past decade, he has been crafting 100 Omaha community murals featuring local nonprofit leaders who serve a social justice mission. He has dubbed this ambitious cultural endeavor the ‘100 People Project (“Public Art – 100 people”).’ According to the Omaha World Herald, “this is the most ambitious project of Watie White’s life — a project that seeks to put 100 different printed portraits all over the city in the coming months and years.”

Adam Hahn works as a student developer in my Center for Management of IT (CMIT) attic group where we use students from the UNO campus to design, develop, and integrate web apps, games, software, and visualizations for community organizations and other interested clients for a fee. However, when Watie approached us for help in adding a technology element to his 100 people project we decided to work on it while seeking alternate resources. Adam worked closely with Watie to understand the intentions and requirements of the app that would be associated with this project. In his FUSE proposal, Adam is seeking funding to support him in summer to work full time to execute the ideas generated with Watie. Adam plans engineer an app that utilizes AR/VR capabilities to bring Watie’s 100 people artwork to life.

Adam has worked for CMIT/Attic on a variety of projects and has the technical skills to deliver the software solution he has proposed. He has also already developed a good relationship with Watie and has a solid understanding of the intentions of the ‘100 People’ project. I am excited to support him in his endeavor. Adam has a demonstrated ability and knowledge to do the work for the project during the summer and have it ready for Watie in Fall.

Please contact me if there are any questions.

A handwritten signature in black ink that reads "Deepak Khazanchi".

Deepak Khazanchi, Ph.D

Professor of Information Systems & Quantitative Analysis

Associate Dean for Academic Affairs

Community Engagement and Internationalization Officer

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Dear FUSE Selection Committee Members,

My name is Watie White and I'm the artist primarily responsible for the Omaha-wide public arts project, **100 People**. For this project, I am collaborating with 100 different individuals who advocate for grass roots betterment in our city, with each mural taking the shape of a 8'x4' woodcut portrait of the model/advocate. Each of these murals are installed permanently on the exterior of buildings, with each mural having an estimate lifespan of about 40 years. Begun in 2017, there are 43 installed murals throughout the city, with another dozen currently prepared for installation in the spring.

Each of the murals is collaboratively designed by the model and myself, executed by me, and installed by myself and a crew of younger artists and advocates. With each installation, a small coalition is built between Watie White Studio, the individual owner of the building location where the mural will be mounted and the model who was specifically chosen by the building owner and to whom the owner has pledged a 10 year installation (minimum). These murals have created gathering spaces for the communities represented by the model/advocates as well as tacit support and media coverage from those who support the project.

One missing element in this project as originally designed remains the ability for the murals to act more fully as storytellers, to more actively connect to the web of other installed artworks of this project and the social capital that comes from the greater interconnectedness of them together. Thankfully, Adam Hahn with the guidance of Dr. Deepak Khazanchi are building an app to connect the viewer of the mural to online storytelling through short videos, project-wide mapping and alerts when the viewer is near another mural. This will allow the advocate models to more fully communicate their ethics, personality and shared humanity through videos and online media. The work of Adam Hahn will radically increase the engagement and impact of **100 People** throughout Omaha.

Sincerely,

Watie White
Artist