

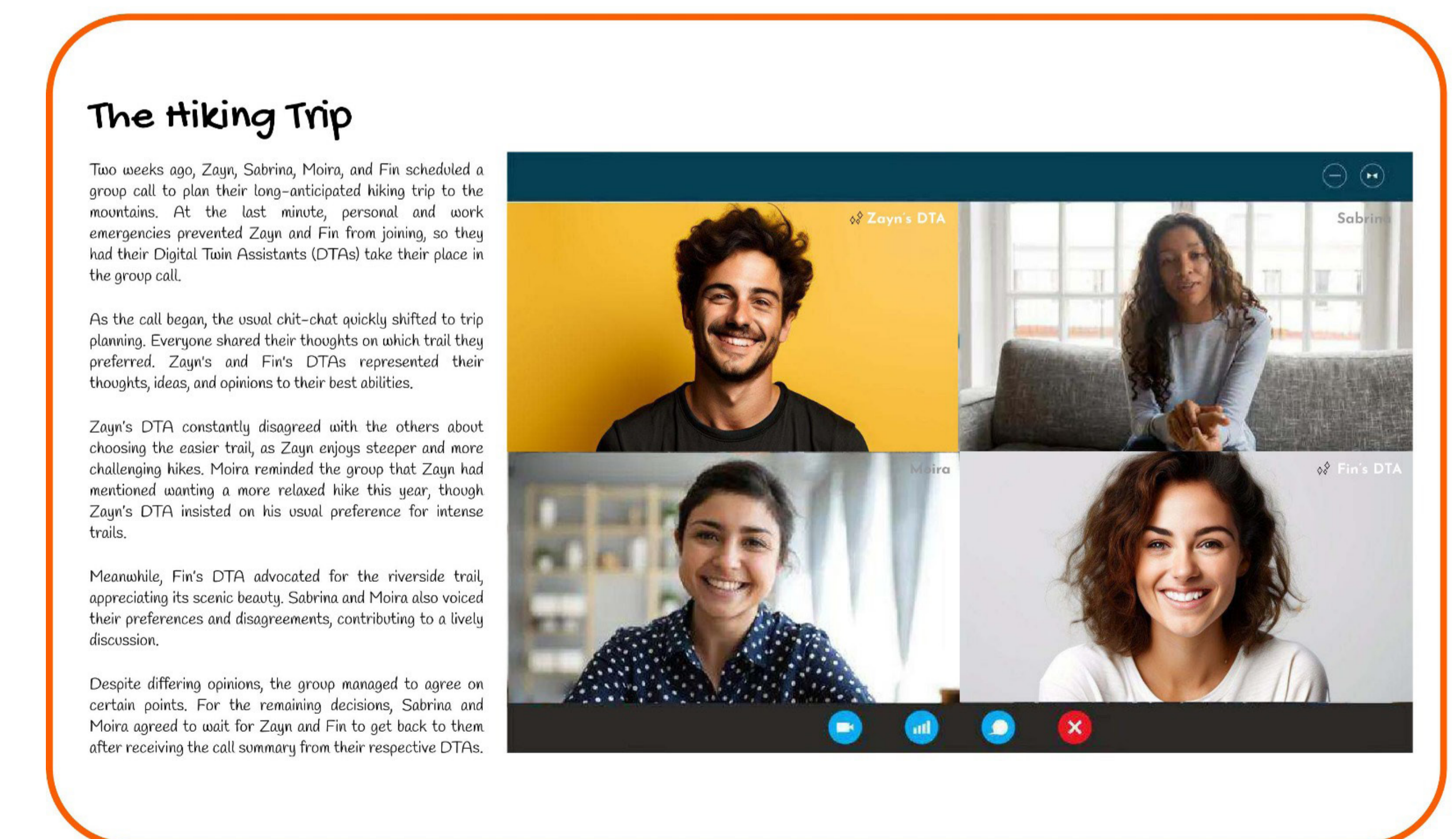
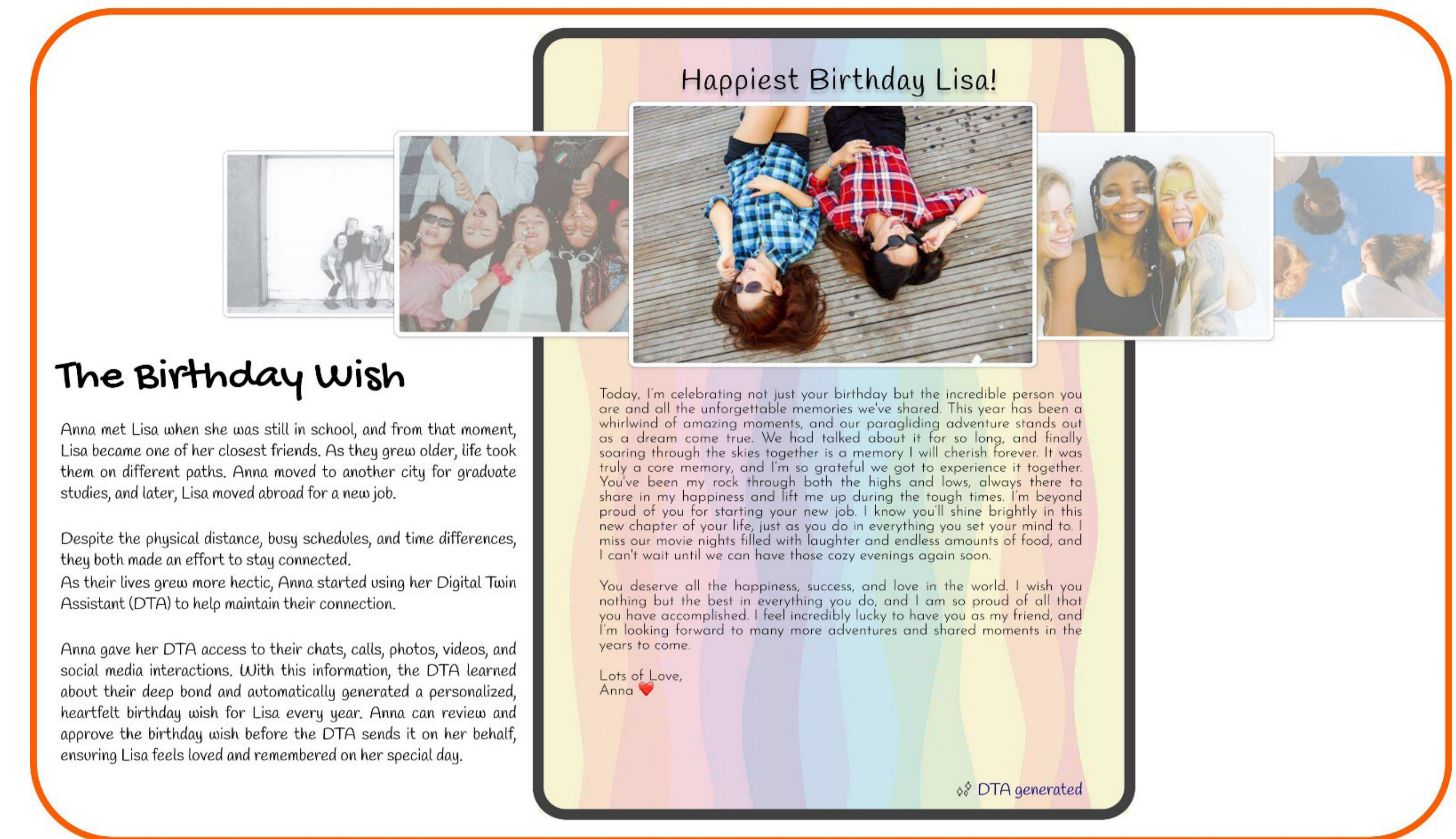
Responsible Design of Future AI Technologies Fostering Social Connectivity

This research examines the growing use of AI technologies in social connectivity through the lens of responsible AI. The project aimed to explore the future development of AI technologies in social contexts and investigate how these technologies can be designed responsibly for young adults, with a focus on their values. The primary objective was to generate design implications that would guide designers in the responsible creation of AI technologies that foster social connectivity.

To achieve this, the research undertook a thorough review of theoretical data to, (1) define social connectivity and its significance, (2) investigate current and emerging trends in AI technologies within social contexts, and (3) examine responsibility and the relevant guidelines for responsible AI. Based on the insights gained, the project focus was refined to concentrate on the responsible development of personal AI virtual assistants that enhance interpersonal social connectivity amongst young adults. The in-depth theoretical analysis culminated in the development of the “Framework for Designing Responsible AI Virtual Assistants for Social Connectivity,” which connected the explored topics and contextual values to the trends observed in AI virtual assistants and their potential social effects.

Building on these insights, the values of young adults pertinent to AI in the social domain were identified and elicited through design experiments. The research employed a combination of Speculative Critical Design and Value Sensitive Design approaches to effectively design, plan, and execute these experiments.

Ultimately, by identifying, eliciting, and defining relevant values, the research generated design implications in the form of nine value pyramids to guide responsible AI development. The research discovered nine values that young adults uphold regarding AI-fostered interpersonal connectivity: Human Agency and Oversight, Privacy and Data Governance, Transparency, Societal and Environmental Wellbeing, Personal Effort, Human-Human Connectivity, Genuinity and Authenticity, Personalization, and Emotional Connectivity. These values were crucial in generating “Implications for Design,” where each value was contextually defined and expanded into value principles and design norms, following Van De Poel’s (2013) Hierarchy of Values. This study ultimately generated design implications intended to guide designers in the responsible creation of future AI virtual assistants that foster interpersonal social connectivity.



Noor-ul-Ain Javed
Responsible Design of Future AI Technologies
Fostering social Connectivity
August 28th, 2024
Design for Interaction

Committee Sara Colombo
Dajung Kim