# Envisioning New Futures of Positive Social Technology: Beyond Paradigms of Fixing, Protecting, and Preventing

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Social technology research today largely focuses on mitigating the negative impacts of technology and, therefore, often misses the potential of technology to enhance human connections and well-being. However, we see a potential to shift towards a holistic view of social technology's impact on human flourishing. We introduce ***Positech***, a shift toward leveraging social technologies to support and augment human flourishing. This workshop is organized around three themes relevant to Positech: 1) "Exploring Relevant and Adjacent Research" to define and widen the Positech scope with insights from related fields, 2) "Projecting the Landscape of Positech" for participants to outline the domain's key aspects and 3) "Envisioning the Future of Positech," anchored around strategic planning towards a sustainable research community. Ultimately, this workshop will serve as a platform to shift the narrative of social technology research towards a more positive, human-centric approach. It will foster research that not only fixes technologies and protects or prevents humans from technology's faults but also enriches human experiences and connections through technology.

CCS Concepts: • **Human-centered computing → Collaborative and social computing**.

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## 1 INTRODUCTION

Recent research in social computing, particularly involving social media, has primarily and justifiably focused on addressing the flaws inherent in current platforms (e.g., Twitter/X, Instagram). However, this predominant focus often

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limits the exploration of new, potentially more beneficial socio-technical systems. This contrasts with earlier periods, when the research environment was more conducive to pioneering new models for social technology, as evidenced by research products such as MovieLens [22]. Today, in social computing systems research for example, large-scale research interventions are often confined within the bounds of platforms like Facebook and Instagram, limiting the scope for testing novel concepts [13–15, 24]. Furthermore, legislative approaches focus reactively on addressing problems on specific, existing platforms rather than proactively considering new possibilities [1, 2, 29, 35] for the future of social technologies, adding to the perception of viewing social media as a fixed entity.

Given the human tendency toward negativity bias [38], it is natural to prioritize prevention; however, it is equally important to maximize opportunities and focus on positive aspects and healthy potentials to achieve a balanced approach. This shift towards a more holistic perspective is exemplified in the field of psychology, which historically took a pathology-centered approach primarily focused on diagnosing and addressing mental dysfunctions. However, by the late 1980s, it broadened its horizon with the advent of "positive psychology" [33]. This field arose from the understanding that people seek more than just relief from suffering; they aspire to live meaningful, fulfilling lives, nurturing their best qualities and enriching their experiences of love, work, and play [32]. Decades of research in positive psychology have demonstrated that enhancing positive affect or life satisfaction is not a straightforward task, nor is it merely about removing negative affect [30]. For example, Ed Diener's tripartite model of subjective well-being directly addresses such a paradigm by highlighting three interconnected yet separate components of well-being: *"frequent positive affect, infrequent negative affect, and cognitive evaluations such as life satisfaction"* [11].

Similar opportunities for positive impact are emerging in social technology research. To illustrate this, we consider social media as a representative example. Much research has understandably focused on addressing issues such as problematic social media use [10, 18, 23, 25, 28, 37, 39, 40], the adverse effects of social media on mental health [9, 16, 18–20, 23, 25, 28, 39], the effect of misinformation/disinformation on political dynamics [36, 41], and the implications of privacy violations [3, 4, 17, 26, 42, 44]. However, an additional, complementary approach allows us to more comprehensively address social media's core potential: fostering and amplifying human flourishing through the cultivation of positive emotions, engagement, relationships, meaning, purpose, and accomplishments, in accordance with the PERMA model of well-being [31]. To truly harness social media as a technology centered on human flourishing, our research, design, and development must prioritize and be sensitive to both inter- and intra-personal growth and needs. We see great promise in integrating scientific knowledge and theories regarding how to make life more fulfilling into research on social technologies and in designing and creating new sociotechnical environments that better support human and societal flourishing through social interaction.

### 1.1 Positech

Given the historical evolution of social computing research and the rise of positive psychology, we propose ***Positech*** as the theme of our workshop. Positech is a *framework* that advocates for a shift in how we engage with technology, emphasizing its potential to support and enhance human flourishing. It is characterized by focusing on the potential and opportunities for innovation and positive change that center on human flourishing rather than merely rectifying issues in humans or technology. Positech is both a framework and a set of efforts encompassing the development of technologies, legislative actions, industry initiatives, theoretical research, and meta-scientific research.

Positech is closely related to other fields that apply principles analogous to those of positive psychology to technology, including positive technology [6, 27], positive computing [8], and asset-based approaches [43]. Positive technology, an extension of cyberpsychology, views positive personal experience as a dependent variable that may be manipulated

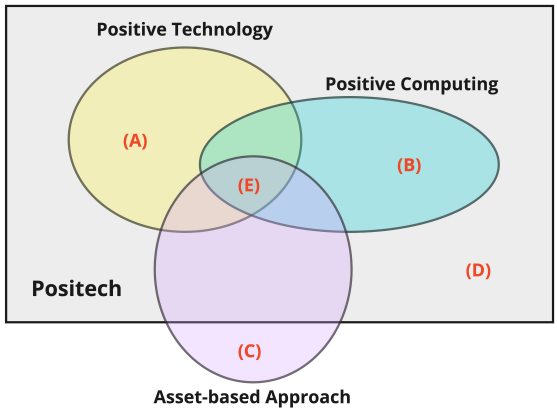


Fig. 1. Venn Diagram of Positech and Related Concepts

through technology by means such as structuring personal experience using a goal or feedback system or by replacing personal experience with a synthetic one (e.g., virtual reality systems) [12]. Positive computing focuses on going beyond viewing obstacles or compromises to well-being as errors and addressing components of well-being and human potential in an application with a different overall goal. It aims to incorporate the consideration of well-being throughout all cycles of technology design and development [12]. Asset or strength-based approaches focus on identifying the assets, such as existing knowledge, strengths, and capacities that individuals already possess, and leveraging those rather than focusing on what they lack or need [43].

Figure 1 shows the relationships between Positech and its adjacent fields. Here, we lay out the distinct guiding questions of each field for each labeled area in the figure.

(A) *Positive Technology:* How can we use technology to increase emotional quality, engagement, and connectedness in personal experiences (e.g., therapy)?
(B) *Positive Computing:* How can we account for well-being determinants such as autonomy, competence, relatedness, compassion, engagement, and meaning at every stage of interaction design?
(C) *Strength-based Approach:* How can we build upon users' strengths and self-determination in using and engaging with technology?
(D) *Positech:* How are we balancing the needs for fixing and innovating technology in supporting human flourishing in areas such as positive affect and meaning?

An example outcome at the intersection of these fields (labeled (E) in Figure 1) could include research on a proof-of-concept for a new social media platform designed to explore new possibilities for increasing human connectedness. This platform would leverage people's intrinsic motivations to empathize with others to enhance the effectiveness of peer support.

Positech is distinct from positive technology or computing, which focuses on technology design to improve personal well-being and quality of life. While the principles of positive technology and positive computing guide the creation of systems that would be considered Positech, these principles represent just one aspect of the broader ideological and practical approach that defines Positech. Positech encompasses not just the creation of technology but also a transformative force in social technology development through efforts including a wider ethical and societal dialogue

about technology's role in society. In contrast to the asset-based approach, Positech does not define users' roles in technology use. Instead of focusing on the assets or deficits of individuals, Positech research would aim to maximize the potential of technology in supporting universally valued aspects of human life, drawn from principles in positive psychology, such as fostering connections and self-actualization. While a strength-based approach may be employed in creating positive computing or technology outcomes, Positech does not make value judgments on individual capacities, which can vary across cultural and contextual lines.

It is important to note that within the Positech framework, we prioritize enriching interpersonal and personal experiences, viewing technology primarily as a supportive tool. While social technologies hold transformative potential for facilitating human connections, it should not replace them by default. Our goal is for technology to amplify direct human interactions and, where necessary, create new avenues for meaningful engagement. This ensures that technology *enhances rather than substitutes for meaningful and authentic human connections*, maintaining our focus on supporting the core elements of human flourishing.

### 1.2 Relevance to the CSCW Community

We recognize that within the CSCW community, there are already numerous research initiatives that embody the principles of Positech, focusing on proactively enhancing human flourishing and well-being through technology []. Our vision is not to present these ideas as new but to acknowledge and unify these scattered efforts under the Positech framework. By doing so, we aim to consolidate and amplity the impact of work that aligns with our goals:

(1) **Beyond *fixing* people,** toward the goals of positive psychology such as human flourishing and well-being. This direction is in contrast to work that exclusively documents harms or seeks to effect behavior change without the intention of the user.
(2) **Beyond *fixing* technology,** toward new paradigms and design patterns that prioritize positive psychology. This direction is in contrast to work that works within the framework of existing platforms to mitigate harms that currently exist on them.

These directions are not entirely separate but depict two different orientations toward our goals that best represent different types of research contributions. By focusing on both immediate and broader possibilities, we envision a future where CSCW is instrumental in unlocking the full potential of social technologies to contribute to human flourishing. However, it is crucial to acknowledge that social technology research has played a significant role in bringing us to our present understanding, and it is not the intention to diminish the value of these contributions. Rather, we call for a broader perspective that includes seeking new possibilities that would complement rather than replace current research momentum.

## 2 ORGANIZERS

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**Lindsay Popowski** is a PhD candidate in the Stanford University Computer Science Department. Her research is in the field of social computing systems, with an emphasis on the design of social media. She works to design and build

online spaces that facilitate to unique social goals, such as strong interpersonal relationships, reciprocation of effort, and conversational context. She also conducts empirical studies to understand user perceptions and mental models of social media affordances.

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## 3 GOALS AND AGENDA

Our hybrid workshop at CSCW 2024 will bring together 15-30 researchers/practitioners/designers to discuss the area of Positech: aiming to envision new futures of positive social technology and strategize on how to support each other's

efforts. Our aims are to explore the overlapping fields of research that contribute to Positech, project a current landscape and future agenda for Positech, and put a plan in place towards building community and support in this research area. This workshop puts specific focus on community-building and collaborative agenda-setting; for this reason we dedicate most time towards small-group brainstorms and discussions, rather than individual research presentations, as well as develop a plan for community continuation. We also plan to collaboratively develop a course syllabus through the workshop as a way to advance and project the Positech research agenda.

### 3.1 Agenda

Table 1. Workshop Agenda

| Time | Activity |
|---|---|
| 9:00-10:00am | Welcome and Attendee Introduction |
| 10:00-10:20am | Coffee Break |
| 10:20-11:20am | *Panel*: Positech Histories and Influences |
| 11:20-12:00pm | *Discussion*: Positech Boundaries and Overlaps |
| 12:00-1:30pm | Lunch Break |
| 1:30-2:50pm | *Brainstorm, Share, Synthesize*: Positech Challenges and Promising Directions |
| 2:50-3:10pm | Coffee Break |
| 3:10-3:50pm | *Brainstorm, Share*: How to Support Positech Research |
| 3:50-4:40pm | *Brainstorm, Share*: Positech Community Futures |
| 4:40-5:00pm | Closing |
| 6:30pm | (Optional) Dinner Social Event |

The workshop agenda is structured to facilitate a comprehensive exploration of Positech, beginning with a brief welcome from the organizers and introductions (1-2 minutes) from each participant. Following the introductions, participants will dive into a panel discussion led by leading researchers in fields related to Positech, exploring the intersection of social technologies and human flourishing. This session aims to lay the groundwork for subsequent activities by highlighting existing research and theoretical foundations. **Coffee Break.** The day continues with small group discussions (grouped by disciplinary orientation and methods[1]) of identifying the bounds of Positech through paper and research idea generation. Groups will then share back out to the broader workshop to sort out a practical group definition for the remainder of the day.

Post-lunch, participants will again break into groups (based on research interests), where participants will brainstorm ideas of projects and opportunities in the Positech vision for their particular areas of interests. Following the group breakout, groups will share back out to the broader workshop, and we will have room for discussion on common struggles or potential angles. **Coffee Break.** After break, we will split into new groups based on career stage to discuss ways of mutual support for Positech. We will share out into the main group and then do one more group discussion (in groups based on geographic proximity) to discuss how to systematize our different ideas of supporting each other, and ways to preserve the community going forward. We will align as a full group onto the different suggestions with enthusiastic support and make plans on how to put these into place going forward.

[1]Participants will be grouped using a follow-up Google Form sent to selected attendees.

The workshop concludes with a synthesis of the day's insights and a plan for next steps, underscored by a commitment to continue the momentum beyond the workshop itself, possibly through the to-be-determined ideas we devise from our last workshop activity. Table 1 shows the activities we have planned for our workshop.

### 3.2 Goals

Our workshop activities are motivated by particular goals.

*3.2.1 Theme 1: Exploring Relevant and Adjacent Research.* We explore this theme via the "Positech Histories and Influences" Panel. In our panel discussion, we will invite experts across fields that overlap with Positech to explore the following questions:

- *Historical Lessons:* What can we learn from prior research on social technologies? How can that inform future research directions? How have previous platforms/research projects influenced current social technologies?
- *Defining Positech:* What boundaries on the definition of Positech laid out in this proposal are shaky? What do we think are important distinctions to draw between Positech and related fields or frameworks?

*3.2.2 Theme 2: Projecting the Landscape of Positech.* We address this theme via two Discussions: "Positech Boundaries and Overlaps" and "Positech Challenges and Promising Directions."

We aim to map the current landscape of Positech. Key questions for discussion include: What constitutes Positech? What are its challenges and opportunities? To facilitate this exploration, participants will collaborate in groups to design a course syllabus regarding themes around Positech: origins, overlapping fields and frameworks, and different ongoing research directions.

*3.2.3 Theme 3: Envisioning the Future of Positech.* This theme is addressed through the "How to Support Positech Research" and "Positech Community Futures" Discussions.

For the final activity of our workshop, we will engage in a brainstorming session to outline our post-workshop plans. This will be conceptualized as a research question: *How can we maintain an asynchronous, geographically dispersed, cross-generational, and (potentially) culturally diverse research community?* Addressing community continuity is a complex challenge that has garnered much attention in social computing [5, 7, 21], and social technologies are perhaps our best tool for sustaining such a community across geographical distances. [2]

We plan to implement strategies developed during the session to ensure the momentum generated by our workshop continues to build. Relevant questions include:

- *Ideal scenarios.* What does an ideal future look like with Positech fully integrated into social technology research and society in general?
- *Sustaining Positech.* How can we keep the momentum alive post-workshop? How should this community function and interact? How can assist others in the Positech community with research?
- *Unintended consequences.* How can we anticipate unintended consequences of new technologies or communities proactively and prevent them at an early stage? How can we ensure that Positech actually prioritizes and supports the well-being of individuals and communities?

[2] One example idea that may come out of this discussion is a Slack [34] bot designed to facilitate interaction among participants. This bot would pair members for virtual coffee chats, using conversation starters linked to their research interests to foster sustained dialogue and collaboration.

### 3.3 Deliverables

We aim to come away from the workshop with two main takeaways:

(1) Positech Syllabus: a collaboratively-constructed syllabus for a hypothetical course aimed at upper-level undergraduates or graduate students on Positech. This syllabus will outline the course's overview and motivation, feature 8-15 weekly themes covering various Positech aspects, include recommended weekly readings, and detail assignments such as projects and reading responses. We will share the result on our website as a resource for the wider community. (Developed during first two discussions, including insights from the panel.)
(2) Positech Community Plan: a set of steps to develop and maintain a community of researchers engaged in the Positech vision. This will include ideas for maintaining communication between attendees, facilitating discovery for newcomers to the area, and ways to connect members with support within the community. (Developed during last two discussions.)

## 4 WORKSHOP LOGISTICS

### 4.1 Website

The link to our website is https://positech-cscw-2024.github.io/. We have prepared the website with an overview of our workshop, a call for participation, and key information about the workshop including the workshop agenda, and organizer information. We also plan to publicize any outcome of our workshop, such as the hypothetical Positech course syllabi and workshop submissions, if given the authors' consent.

### 4.2 Pre-workshop Plan

**Call for participation.** We will invite 25-30 individuals interested in the goal of envisioning new futures of positive social technology to participate in our hybrid-format workshop. Submissions are welcomed in several forms:

- Position papers or drafts (2-6 pages, ACM single-column format, excluding references) discussing themes of the workshop. Alternate forms such as design fiction are encouraged.
- "Encore" submissions of relevant conference or journal papers.
- Statements of research interest (up to 2 pages, ACM single-column format, excluding references).

**Selecting participants.** Submissions will be reviewed by the organizers based on: 1) relevance to the workshop's theme, 2) quality of the submission, and 3) diversity of perspectives. This approach will ensure a rich exchange of ideas among participants from varied backgrounds and specialties.

**Workshop preparation.** To make the workshop accessible globally, we are adopting a hybrid format. Recognizing the challenges of international travel, virtual attendance is fully supported. Prior to the workshop, we will survey participants to understand their accessibility needs, constraints, and expectations. This feedback will inform the logistics and schedule, with experienced organizers ensuring an engaging experience for both in-person and remote attendees. We will also oversee securing experts to lead our panel discussion.

### 4.3 Accessibility

### 4.4 Post-workshop plan

Our workshop is designed to generate (a) a syllabus, and (b) a plan for community building after the workshop. We plan to make the syllabus widely available and publicize it after the workshop. We also plan to follow the community building plan to keep our ties and build new ones after the workshop.

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