



SoftNet 2021 Experts Panel III
Design and Synthesis of Personalities

(synthesis of personalities, adoption of AI digital, conversational user interfaces, observability, ramifications of personalities, emotional intelligence, digital co-workers)

SoftNet
2021

Panel Discussion at The Fourteenth International Conference on Advances in Human-oriented and Personalized Mechanisms, Technologies, and Services (CENTRIC) 2021

October 3-7 – Barcelona, Spain / Online

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Chair: *Jeff Stanley*, Lead Human-Centered Engineer, the MITRE Corporation, USA





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- Mission: Solving problems for a safer world
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Jeff Stanley

For 15 years before joining MITRE, Jeff developed interactive applications for organizations such as the Smithsonian Institution, Rosetta Stone, and Ubisoft Entertainment.

Since joining MITRE in 2017, he has led research on human-machine teaming and accessibility.

Jeff holds advanced degrees in Computer Science and Anthropology and an undergraduate degree in Linguistics. His research interests include human-nonhuman interaction, social impacts of technology, sociolinguistic analysis, and the intersection of language and art.



Email: jstanley@mitre.org

 <https://www.linkedin.com/in/jeffcstanley/>



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Narrative on the table

- Personality synthesis is an important and timely topic. Why? What are the use cases?
 - Chatbots, voice interfaces
 - Virtual assistants, humanized apps
 - Autonomous vehicles
 - Robot helpers and companions.
- Two big questions for personality design:
 - **What is the right personality** (or personalities) for a use case?
 - Once the right personality is decided, **how is that personality expressed?**
- Risks and next steps:
 - Development teams need **guidance** to effectively design personality into their applications.
 - What kinds of **standards** are needed to protect the consumer?



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Food for thought

When it comes to being social, people are built to make the conservative error: When in doubt, treat it as human.

... When media violate social norms, such as by being impolite, the media are not viewed as technologically deficient... The violation is viewed as social incompetence and it is offensive.

Byron Reeves and Clifford Nass, [The Media Equation](#) (1996), pp. 22, 29

Users of poorly designed VUIs [Voice User Interfaces] report feeling “foolish,” “silly,” and manipulated by technology, and so they avoid repeat usage. But it doesn’t have to be this way.

... Don’t leave your VUI persona to chance. From the very beginning, create the ideal employee to represent your brand... Use this persona as an anchor to ground your user experience and give it a familiar consistency.

James Giangola, “Conversation Design: Speaking the Same Language” (2017),
<https://design.google/library/conversation-design-speaking-same-language/>



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Structure of the panel

Chair

- **Jeff Stanley**, Lead Human-Centered Engineer, MITRE, USA

Panellists

- **Charles Rinker**, PRSONAS, USA
- **Jennifer Strickland**, MITRE, USA
- **Natalie Friedman**, Cornell Tech, USA
- **Corey Miller**, MITRE / Georgetown University, USA
- **Sara Beth Elson**, MITRE, USA
- **Kelly Horinek**, MITRE, USA



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Panellist Position

AI Digital Workforce: Principles for Successful Adoption and Scalability

Charles Rinker, PRSONAS, USA, crinker@prsonas.com

- Defining a human user experience and the challenges of scaling in our physical world
- Why setting AI communications back 2 billion years improves our growing hybrid workforce
- How inclusivity, empathy and emotion drive adoption
- Adapting these principles to specific use case solutions and taking them to scale
 - Focus on human communication, not replication
 - Digital employees increase the number of high-value human positions
 - Adopt frictionless technologies: No training required!
 - Creating standards to support a device-agnostic digital workforce





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Panellist Position

Inclusive Personalities for Conversational User Interfaces

Jennifer Strickland, MITRE, USA jstrickland@mitre.org

- Background of conversational user interfaces (CUI) and inclusive design
- Differences in needs for private and public sector audiences
- Challenges for inclusive CUI personalities
- Recommendations for inclusive CUI personalities

→ The current design of CUIs generally fail to consider audience diversity.

→ The current approach is to take a 'neutral' personality, yet that is rooted in unconscious bias.

→ CUI research needs to consider frameworks like Inclusive Design and Design Justice to meet inclusion and equity.

→ CUI development teams should take full advantage of user-centered research and design tools, to understand and anticipate the range of needs, attitudes, and expectations of their users.





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Panellist Position

Supporting Observability through Social Cues

Natalie Friedman, Cornell Tech, USA nvf4@cornell.edu

- Approaches to artificial personalities
 - How personality can be visualized in different modalities
 - Related research to the visualized personality
- How do each of these personality traits demonstrate observability?
- Common patterns that emerge from our review
- Design recommendations





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Panellist Position

Linguistic and Speech Technological Ramifications of Personality

Dr. Corey Miller, MITRE / Georgetown University, USA camiller@mitre.org

- How is personality expressed through language?
- How do interlocutors negotiate style?
- How does speech technology impact the conversational experience?
- What macro- and microsociolinguistic factors are at play?



→ Personality infuses all levels of linguistic expression

→ Interlocutors express their relationships through linguistic convergence and divergence

→ The quality and breadth of speech technology impacts the authenticity of the experience

→ The linguistics of personality needs to be accounted for in both conversational and technological design



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Panellist Position

Personality Design for a Serious Game to Promote Emotional Intelligence

Dr. (Sara) Beth Elson, MITRE, USA selson@mitre.org

- Defining Emotional Intelligence
- Introducing a Serious Game to Promote Emotional Intelligence within Couples' Relationships
- How We Implemented Emotional Intelligence When Designing a Personality within the Game
- Need for Research on the Validity of Such Implementations

→ Emotional intelligence comprises a wide variety of concepts

→ We designed a serious game to promote emotional intelligence within couples' relationships

→ To design this game, we implemented a personality with varying degree of emotional intelligence at different times

→ More research is needed to verify that we have accurately implemented the concept





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Panellist Position

ACQ-SYNC | JumpStart: Building a Digital Assistant You Want to Work With

Kelly Horinek, MITRE, USA khorinek@mitre.org

- Personality begins with a name
 - The building blocks of clothing and speech
 - Directability in Digital Assistants: From Pro Tips to Tough Love
 - Don't hang your Digital Assistant out to dry, back them up with live support
 - Bringing it all together to design a digital assistant for acquisition
- Design for Approachability
- Don't underestimate the power of Beautiful Design
- Personality is part of your brand and acceptance





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jstanley@mitre.org

 **<https://www.linkedin.com/in/jeffcstanley/>**

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