

**17th International Conference on Design Science Research in Information Systems and  
Technology (DESRIST 2022)  
St. Petersburg, FL USA**

**Conference Theme - The Transdisciplinary Reach of Design Science Research**

**DESRIST 2022 Conference Program**

<b>Wednesday – 1 June 2022</b>		<b>Rooms: Lynn Pippenger Hall (LPH)</b>
8:30 am – 4:30 pm	<b>Registration</b>	LPH Atrium
9:00 am – 5:00 pm	<b>DESRIST Doctoral Consortium</b> Anol Bhattacharjee and Jeff Parsons, Chairs	LPH 123 <b>Breakout:</b> LPH 128
10:00 am – 10:30 am	<b>Coffee Break</b>	LPH Atrium
12:00 pm – 1:30 pm	<b>Doctoral Consortium Lunch</b>	LPH Atrium
1:00 pm – 5:00 pm	<b>Industrial Workshop</b> Alison Barlow, Dennis Edwards, Joe Partlow, Isaiah Wilson, and Matthew Mullarkey, Chairs	LPH 229 <b>Breakouts:</b> LPH 213 LPH 214 LPH 222 LPH 223
3:00 pm – 3:30 pm	<b>Coffee Break</b>	LPH Atrium
5:00 pm – 7:00 pm	<b>DESRIST 2022 Conference Reception</b>	LPH 418 – Dean’s Reception Area

<b>Thursday, 2 June 2022</b>		<b>Rooms: Lynn Pippenger Hall (LPH) USF Student Center (USC)</b>
8:00 am – 4:00 pm	<b>Registration</b>	USC Ballroom Atrium (Morning) LPH Atrium (Afternoon)

8:30 am – 10:00 am	<p><b>Conference Opening Session</b></p> <p><b>Welcome and Introductions</b></p> <ul style="list-style-type: none"> <li>- Alan Hevner and Matthew Mullarkey – Conference Organizers</li> <li>- USF Welcome</li> <li>- St. Petersburg Welcome</li> </ul> <p><b>Keynote Address – Dr. Agnis Stibe</b> “Designing Transformation with Human Artificial Intelligence”</p>	USC Ballroom (Second Floor)
10:00 am – 10:30 am	<b>Coffee Break</b>	USC Ballroom Atrium
10:30 am – 12:00 noon	<p><b>Paper Session 1: Transdisciplinary Research and DSR</b></p> <p>Session Chair: Sandeep Purao</p> <p>“An Information Systems Design Theory for Digital Broker Platforms” Katja Bley, Raoul Hentschel and Ilias Pappas</p> <p>“Morphological Analysis for Design Science Research: The Case of Human-Drone Collaboration in Emergencies” Mateusz Dolata and Kiram Ben Aleya (Best Paper Nomination)</p> <p>“All Good Things Come in Threes: A Digital Platform for Data-Driven, Interdisciplinary, and Replicable Research” (Research in Progress) Barbara Dinter, Sarah Hönigsberg and Oliver Specht Download Paper from DESRIST Website</p> <p>“Emerging Challenges of Evaluating Immersive Virtual Reality Safety Training: An Early Design Science Perspective” (Research in Progress) Amir Haj-Bolouri and Matti Rossi Download Paper from DESRIST Website</p>	USC Ballroom – Room A
10:30 am – 12:00 noon	<p><b>Paper Session 2: Education and DSR</b></p> <p>Session Chair: Robert Winter</p> <p>“System Design Principles for Intergenerational Knowledge Sharing” Irawan Nurhas, Xelia Mattick, Stefan Geisler and Jan Pawlowski</p> <p>“User Experience Requirements of Digital Moderation Systems in South Africa: Using Participatory Design within Design Science Research” Vanitha Rajamany, Judy van Biljon and Corné Van Staden</p> <p>“‘Designing’ Design Science Research – A Taxonomy for Supporting Study Design Decisions”</p>	USC Ballroom – Room B

	Hanlie Smuts, Robert Winter, Alta Van der Merwe and AURONA GERBER (Best Paper Nomination)	
10:30 am – 12:00 noon	<p><b>Paper Session 3: Emerging DSR Methods</b></p> <p>Session Chair: Jan vom Brocke</p> <p>“Toward a Method for Reviewing Software Artifacts from Practice” Ulrich Gnewuch and Alexander Maedche</p> <p>“A Granular View of Knowledge Development in Design Science Research” Nicolas Prat, Jacky Akoka, Isabelle Comyn-Wattiau and Veda Storey</p> <p>“Towards a Scheme for Contribution in Action Design Research” Casper Solheim Bojer and Charles Møller</p>	<b>USC Ballroom – Room C</b>
12:00pm – 1:30 pm	<p><b>Lunch</b></p> <p><b>Keynote Address by Ben Shneiderman</b> “Human-Center Artificial Intelligence”</p>	<b>USC Ballroom and Atrium (Second Floor)</b>
1:30 pm – 3:00 pm	<p><b>Paper Session 4: Transdisciplinary Research and DSR</b></p> <p>Session Chair: Pavankumar Mulgund</p> <p>“A Personalized Conversational Agent to treat Depression in Youth and Young Adults – A Transdisciplinary Design Science Research Project” Florian Onur Kuhlmeier, Ulrich Gnewuch, Stefan Lüttke, Eva-Lotta Brakemeier and Alexander Mädche</p> <p>“Design Principles in Transdisciplinary DSR: A Boundary Object for Boundary Spanning” Frederik Möller, Leona Chandra Kruse, Thorsten Schoormann and Boris Otto</p> <p>“Supporting Product Development by a Trend Analysis Tool applying Aspect-Based Sentiment Detection” Janik Woerner, Isabel Schmid, Daniel Konadl and Susanne Leist</p>	<b>LPH 229</b>
1:30 pm – 3:00 pm	<p><b>Paper Session 5: Education and DSR</b></p> <p>Session Chair: AURONA GERBER</p> <p>“Designing Virtual Toolboxes to Guide Educators in Creating Online Learning” Lea Blecher, Lara Riefle and Tomi Kauppinen</p> <p>“DSR Teaching Support: A Checklist for Better DSR Research Design Presentations” Marcel Cahenzli (Best Student Paper Nomination)</p>	<b>LPH 223</b>

<p>1:30 pm – 3:00 pm</p>	<p><b>Paper Session 6: Emerging DSR Methods</b></p> <p>Session Chair: Alta van der Merwe</p> <p>“SeniorDT: A Design Thinking-Based Approach to Requirements Engineering Involving Elderly Users” Alexandra Jussli, Kathrin Kim, Heiko Gewalt and Jason Thatcher</p> <p>“Toward an Information Systems Ontology” Roland M. Mueller, Sebastian Huettemann, Kai R. Larsen, Sen Yan and Abram Handler</p> <p>“Uncovering Strategies of Design Principle Development” (Research in Progress) Thorsten Schoormann, Frederik Möller and Leona Chandra Kruse Download Paper from DESRIST Website</p> <p>“Addressing the Dichotomy of Theory and Practice in Design Science Research Methodologies” (Research in Progress) Christian Daase, Matthias Volk, Daniel Staegemann and Klaus Turowski (Best Student Paper Nomination) Download Paper from DESRIST Website</p>	<p><b>LPH 214</b></p>
<p>3:00 pm – 3:30 pm</p>	<p><b>Coffee Break</b></p>	<p><b>LPH Atrium</b></p>
<p>3:30 pm – 5:00 pm</p>	<p><b>Session 7: Blockchain Information Systems</b></p> <p>Session Chair: Kaushik Dutta</p> <p>“Transient Random Number Seeds in Permissionless Blockchain Systems” Riaan Bezuidenhout, Wynand Nel and Jacques Maritz</p> <p>“Blockchain-Enabled Secure and Smart Healthcare System” Debendranath Das, Amudhan Muthaiah and Sushmita Ruj</p> <p>“Design Principles for Establishing Trust in Decentralized Intercompany Capacity Exchange” (Research in Progress) Nick Große Download Paper from DESRIST Website</p>	<p><b>LPH 229</b></p>
<p>3:30 pm – 5:00 pm</p>	<p><b>Session 8: Sustainable Design</b></p> <p>Session Chair: Nicolas Prat</p> <p>“Towards Designing Smart Home Energy Applications for Effective Use” Saskia Bluhm, Philipp Staudt and Christof Weinhardt (Best Student Paper Nomination)</p>	<p><b>LPH 223</b></p>

	<p>“An Enterprise Risk Management Framework to Design Pro-Ethical AI Solutions” (Research in Progress)  Quintin McGrath, Alan Hevner and Gert-Jan de Vreede  Download Paper from DESRIST Website</p> <p>“Emancipatory Design Science: A Philosophical Theory Alternative to Value Sensitive Design” (Research in Progress)  Amber Young, Yaping Zhu and Syed Shuva  Download Paper from DESRIST Website</p>	
3:30 pm – 5:00 pm	<p><b>Session 9: Cybersecurity</b></p> <p>Session Chair: Richard Baskerville</p> <p>“Designing Information Security Culture Artifacts to Improve Security Behavior: An Evaluation in SMEs”  Olfa Ismail</p> <p>“Towards a Taxonomy for Classifying Knowledge on Ransomware as a Service (RaaS) Specializations” (Research in Progress)  Tim Smith and Miloslava Plachkinova  Download Paper from DESRIST Website</p> <p>“Words Are Louder Than Actions – Design Requirements for Facilitating Restorative Justice in Data Breaches” (Research in Progress)  Till Ole Diesterhöft, Marvin Braun, Aycan Aslan, Maike Greve and Lutz M. Kolbe  Download Paper from DESRIST Website</p>	<b>LPH 214</b>
5:00 pm – 6:00pm	<b>DESRIST Business Meeting</b>	<b>LPH 229</b>
6:00 pm – 8:00 pm	<p><b>Conference Gala Dinner</b></p> <p><b>Presentation by Mark Cantrell – President and CEO, Florida Orchestra</b></p>	<b>USF Student Center (USC) – Ballroom</b>
8:00 pm – 10:00 pm	<p><b>Conference Social Event</b></p> <p><b>Salvador Dali Museum – Exclusive Access to Exhibits</b></p> <p><b>Presentation by Dr. Kim Macuare, Co-Director of Dali Innovation Labs</b></p>	<b>Dali Museum</b>

<b>Friday, 3 June 2022</b>		<b>Rooms: Lynn Pippenger Hall (LPH)</b>
8:30 am – 12:00 pm	<b>Registration</b>	<b>LPH Atrium</b>

<p>8:30 am – 10:00 am</p>	<p><b>Session 10: Healthcare Systems</b></p> <p>Session Chair: Monica Chiarini Tremblay</p> <p>“Empowering refugees for European bureaucracy: Designing a trustworthy mobile app for document management” Alexandre Amard, Alexandra Hoess, Alexander Rieger, Tamara Roth and Gilbert Fridgen</p> <p>“A Design Science Approach to Blood Donation Apps” Helena Müller and Melanie Reuter-Oppermann (Best Paper Nomination)</p> <p>“Fathers with postpartum depression: A problem-space exploration” Pavankumar Mulgund, Sandeep Puroo and Lavlin Agrawal</p>	<p><b>LPH 229</b></p>
<p>8:30 am – 10:00 am</p>	<p><b>Session 11: Innovation and Entrepreneurship</b></p> <p>Session Chair: Henrik Berglund</p> <p>“Developing an innovation accounting system for a professional service firm: A design science research project” Simon David Arsenidis and Christoph Seckler</p> <p>“Market of Makers – How to Promote Corporate Entrepreneurship with an Effectuation Intervention” Sophia Braun and René Mauer (Best Student Paper Nomination)</p> <p>“Models of Impact: A Methodology and a Toolkit to Generate Sustainable Business Models” Matthew Manos, Samir Chatterjee and Nagla Alnosayan</p>	<p><b>LPH 223</b></p>
<p>8:30 am – 10:00 am</p>	<p><b>Session 12: Intelligent Systems and HCI</b></p> <p>Session Chair: Ulrich Gnewuch</p> <p>“Can Artificial Intelligence Help Used-Car Dealers Survive in a Data-Driven Used-Car Market?” Sven Eckhardt, Kilian Sprenkamp, Liudmila Zavolokina, Ingrid Bauer and Gerhard Schwabe</p> <p>“Assessing the Reusability of Design Principles in the Realm of Conversational Agents” Edona Elshan, Christian Engel, Philipp Ebel and Dominik Siemon</p> <p>“Let’s Team Up with AI! Toward a Hybrid Intelligence System for Online Customer Service” Mathis Poser, Christina Wiethof, Debayan Banerjee, Varun Shankar</p>	<p><b>LPH 214</b></p>

	Subramanian, Richard Paucar and Eva A. C. Bittner (Best Student Paper Nomination)	
10:00 am – 10:30 am	<b>Coffee Break</b>	<b>LPH Atrium</b>
10:30 am – 12:00 noon	<p><b>Session 13: Healthcare Systems</b></p> <p>Session Chair: Debra VanderMeer</p> <p>“A Digitization Pipeline for Mixed-Typed Documents Using Machine Learning and Optical Character Recognition” Tizian Matschak, Florian Rampold, Malte Hellmeier, Christoph Prinz and Simon Trang</p> <p>“Just what the Doctor ordered – Towards Design Principles for NLP-based Systems in Healthcare” Marvin Braun, Aycan Aslan, Till Ole Diesterhöft, Maike Greve, Alfred Benedikt Brendel and Lutz Kolbe</p> <p>“Towards Space Mining: A Smart Space Management Solution to Minimize Indoor Spreading Risk of COVID-19” (Research in Progress) Markus Otto, Gregor Kipping, Michael Gau, Thomas Grisold and Jan vom Brocke Download Paper from DESRIST Website</p> <p>“Towards an IoT Implementation Framework - About a New Building Project of a Hospital in a European Microstate” (Research in Progress) Manuel Weber, Gregor Kipping and Jan vom Brocke Download Paper from DESRIST Website</p> <p>“Investigating Symptom Recognition in Colloquial Patient Narratives” (Research in Progress) Jennifer Xu and Tamara Babaian Download Paper from DESRIST Website</p>	<b>LPH 229</b>
10:30 am – 12:00 noon	<p><b>Session 14: Innovation and Entrepreneurship</b></p> <p>Session Chair: Sophia Braun</p> <p>“The chimera of the simple organization: What is the relevant design knowledge needed to guide small business digital transformation?” Sarah Hönigsberg, Malshika Dias, Barbara Dinter and Munir Mandviwalla (Best Paper Nomination)</p> <p>“How to make smart collaboration work in multidisciplinary teams” Jolanda Burgers-Pas, Christoph Seckler and Jolanda Burgers</p>	<b>LPH 223</b>

	<p>“How to Valuate Impact Startups – Towards a Taxonomy” (Research in Progress) Christin Eckerle, Sarah Manthey and Orestis Terzidis</p>	
10:30 am – 12:00 noon	<p><b>Session 15: Intelligent Systems and HCI</b></p> <p>Session Chair: Frederik Moller</p> <p>“Gamified Expert Annotation Systems: Meta-Requirements and Tentative Design” Simon Warsinsky, Manuel Schmidt-Kraepelin, Scott Thiebes, Martin Wagner and Ali Sunyaev</p> <p>“Chatbot Design Features to Increase Productivity” (Research in Progress) Lukas Ramming, Daniel Konadl and Susanne Leist Download Paper from DESRIST Website</p> <p>“Designing AI-driven Inspiration for Design Professions” (Research in Progress) Hans Christian Klein, Sebastian Weber and Bjoern Niehaves Download Paper from DESRIST Website</p>	<b>LPH 214</b>
12:00 noon – 2:00 pm	<p><b>Lunch and Awards Ceremony</b></p> <p><b>Keynote by Peter Warren Singer</b> “How to Use The Power of a Story Well Told”</p>	<b>LPH Atrium and Auditorium</b>
2:00 pm – 3:30 pm	<p><b>Session 16: Collaborative DSR</b></p> <p>Session Chair: Pascal Le Masson</p> <p>“Action Design Research – Models for Researcher-Practitioner Collaboration” Stefan Cronholm and Hannes Göbel</p> <p>“A Proposed Model of Design Knowledge Appropriation and Recommended Practices to Improve Design Knowledge Accumulation” Oscar Diaz, John Venable and Xabier Garmendia</p> <p>“Analyzing Design Knowledge Representation in Design Science Research and Deriving Recommendations to Support Design Knowledge Codification” Ernestine Dickhaut, Andreas Janson and Jan Marco Leimeister</p>	<b>LPH 229</b>
2:00 pm – 3:30 pm	<p><b>Prototype Demonstrations</b></p> <p>Chairs: Clinton Daniel and Sidney Fernandes</p> <p>“Evaluating design science research artefacts: A case of augmented AI” Danie Smit, Sunet Eybers and Lee-Anne Bierbaum Download Paper from DESRIST Website</p>	<b>LPH 4<sup>th</sup> Floor – Faculty Suites</b>



	<p>“Persuasive Systems to Support Behavior Change in the Context of Higher Education”  Vanessa Maria Steinherr, Simon Graeber and Alexander Simon Rudenko  Download Paper from DESRIST Website</p> <p>“Open Data Product Specification”  Jarkko Moilanen  Download Paper from DESRIST Website</p> <p>“A Serious Game as Online-Application for Dynamic Business Model Adaptation”  Ricarda Schlimbach, Benjamin Karatschinez and Susanne Robra-Bissantz  Download Paper from DESRIST Website</p> <p>“A Rapid Prediction and Response System (RPARS) to Facilitate Guided Self-Regulation During Pandemics”  Jeffrey Sweeney, Karthik Srinivasan and Peter Vervest  Download Paper from DESRIST Website</p> <p>“Designing Resilient AI-based Robo-Advisors: A Prototype for Real Estate Appraisal”  Max Schemmer, Patrick Hemmer, Niklas Kühl and Sebastian Schäfer  Download Paper from DESRIST Website</p> <p>“Introducing Vicky: A Pedagogical Conversational Agent for the Classification of Learning Styles”  Bijan Khosrawi-Rad, Paul Keller, Linda Grogorick and Susanne Robra-Bissantz  Download Paper from DESRIST Website</p> <p>“How to assemble an Automatic Water Dispenser System – Design of a Learning Station feat. Augmented Reality”  Jan Wagener and Lukas Rudolf Germut Fitz  Download Paper from DESRIST Website</p> <p>“An Extension of PlanDigital: Software Support for Collaborative Idea Management in SMEs”  Jörg Becker, Andreas Hermann, Torsten Gollhardt, Constantin von Herbay and Ann-Kristin Cordes  Download Paper from DESRIST Website</p> <p>“Designing a Tool to conduct Real-Time Delphi Studies in Research Projects”  Julien Hofer, David Walter and Ralf Knackstedt  Download Paper from DESRIST Website</p> <p>“Video Avatars: A Form of Artificially Intelligent Synthetic Media Used to Augment Communication in the B2B Customer Experience”</p>	
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	<p>Jill Schiefelbein Download Paper from DESRIST Website</p> <p>“Non-Fungible Tokens (NFT) in Additive Manufacturing: A Digital Tool for Enhancing IPR Protection” Alireza Jaribion, Adriaan Knapen, Alberto Xamin, Jan Holmström and Siavash H. Khajavi Download Paper from DESRIST Website</p> <p>“Development of a Strategic Decisional Support System for Soccer” Katja Bley, Martin Holthe Rønningen, Paolo Spagnoletti, Ilias Pappas and Raoul Hentschel Download Paper from DESRIST Website</p>	
3:30 pm – 4:00 pm	<b>Coffee Break</b>	<b>LPH Atrium</b>
4:00 pm – 5:00 pm	<p><b>Closing Session</b></p> <p><b>DESRIST 2022 Capstone Discussion: Reflections and Future Directions</b> Moderator: Alan Hevner Discussants: Richard Baskerville, Samir Chatterjee, Sandeep Purao, Maung Sein</p>	<b>LPH Auditorium</b>