



Tuesday 19th June

* This is a general program for Tuesday, specific information about each workshop, course and the Doctoral Consortium will be provided by the organizers of those events.

7:00-7:40 Run around the City, see more information and register here:
<https://goo.gl/11dJNM>

8:00-9:00 Registration for Workshops, Courses and Doctoral Consortium (Elektrobygget “the Electro Building” at Gløshaugen campus - map: <http://bit.ly/2IMgZBp>)

9:00-10:00 Session 1: Workshops, Courses and Doctoral Consortium

10:00-10:15 Coffee Break

10:15-12:15 Session 2: Workshops, Courses and Doctoral Consortium

12:15-13:30 Lunch (provided)

13:30-15:15 Session 3: Workshops, Courses and Doctoral Consortium

15:15-15:45 Coffee Break

15:45-17:15 Session 4: Workshops, Courses and Doctoral Consortium

17:30: Ice-breaker at the [Science Museum of Trondheim](#)

Wednesday 20th June

7:45-8:15 Yoga in the Campus, see more information and register here:
<https://goo.gl/11dJNM>

8:00-8:45 Conference Registration (Elektrobygget “the Electro Building”, Gløshaugen campus) Talks will take place in room “[EL5](#)”, unless otherwise is indicated.

8:45-9:00 Introduction and announcements

9:00-10:00 Keynote: Germane Robots (Pierre Dillenbourg - EPFL)

10:00-10:15 Coffee Break

10:15-11:30 Paper session 1: Mixed Reality and Playful Environments

Session Chair: Bieke Zaman, KU Leuven

- **A Conceptual Framework to Compare two Paradigms of Augmented and Mixed Reality Experiences.**

Laura Malinvern, Cristina Valero, Marie-Monique Schaper, Narcis Pares (Universitat Pompeu Fabra)
- **Designing for Bodily Interplay: Engaging with the Adaptive Social Exertion Game “Plunder Planet”**

Anna Lisa Martin-Niedecken (Zurich University of the Arts)
- **“Pump that Press!”: Design Evaluation of Audience Interaction using Collaborative Digital and Physical Games**

Panagiotis Apostolellis (Virginia Tech)
Marjee Chmiel (Howard Hughes Medical Institute)
Doug Bowman (Virginia Tech)
- **Effects of Playful Audio Augmentation on Teenagers’ Motivations in Cooperative Physical Play**

Yudan Ma (Sanming University / Eindhoven University of Technology)
Tilde Bekker, Xipei Ren, Jun Hu (Eindhoven University of Technology)
Steven Vos (Eindhoven University of Technology & Fontys University of Applied Sciences)

11:30-12:30 Demos and Art (firehose session)

Session Chairs: Marikken Høiseth (NTNU), Gökçe Elif Baykal (Koç University), Anders-Petter Andersson (NTNU), Babak Farshchian (SINTEF)

12:30-13:30 Lunch (provided)

13:30-14:15 Late Breaking / Work in Progress (firehose session)

Session Chairs: Sharon Chu (Texas A&M University), Kate Howland (University of Sussex), Netta Iivari (University of Oulu)

14:15-15:30 Paper Session 2: Designing Together

Session Chair: Ole Sejer Iversen, Aarhus University

- **Co-Designing Voice User-Interfaces with Teenagers in the Context of Smart Homes**

Dan Fitton, Janet Read, Gavin Sim, Brendan Cassidy (University of Central Lancashire)

- **Co-Designing Online Privacy-Related Games and Stories with Children**

Priya Kumar (University of Maryland),
Jessica Vitak (University of Maryland),
Marshini Chetty (Princeton University),
Tamara Clegg (University of Maryland),
Jonathan Yang (Princeton University),
Brenna McNally (University of Maryland),
elizabeth bonsignore (University of Maryland)

- **You Have to Start Somewhere – Initial Meanings Making in a Design and Making Project**

Netta Iivari, Marianne Kinnula, Tonja Molin-Juustila (University of Oulu)

- **Audio Journaling for Self-Reflection and Assessment among Teens in Participatory Media Programs**

Nitin Sawhney (The New School),
Cleve Graver (Fordham University),
Emily Breitkopf (The New School)

15:30-16:30 Demo & Art and Work in Progress Exhibition (Coffee will also be served)

16:30-17:30 Paper Session 3: Designing for Different Abilities

Session Chair: Christopher Frauenberger, Vienna University of Technology

- **MyWord: Enhancing Engagement, Interaction and Self-Expression with Minimally-Verbal Children on the Autism Spectrum through a Personal Audio-Visual Dictionary**

Cara Wilson, Margot Brereton, Bernd Ploderer, Laurianne Sitbon
(Queensland University of Technology)

- **Apraxia World: A Speech Therapy Game for Children with Speech Sound Disorders.**

Adam W Hair (Texas A&M University),
Penelope Monroe (University of Sydney),
Beena Ahmed (University of New South Wales & Texas A&M University at Qatar),
Kirrie Ballard (University of Sydney),
Ricardo Gutierrez-Osuna (Texas A&M University)

- **Bonk: Accessible Programming for Accessible Audio Games**

Shaun Kane, Varsha Koushik, Annika Muehlbradt (University of Colorado Boulder)

18:45 Pipe organ recital in Nidaros Cathedral (*late entrance will not be possible*)

19:30 Reception to To tårn

Thursday 21st June

7:00-7:45 Run around the City, see more information and register here:
<https://goo.gl/11dJNM>

8:00-9:00 Conference Registration (Elektrobygget “the Electro Building” at Gløshaugen campus)

9:00-10:00 Keynote: Capturing the Everyday Magic of Play (Kori Inkpen - Microsoft Research)

10:00-10:15 Coffee Break

10:15-11:30 Papers session 4: Tangible Interaction and Toys

Session Chair: Jason C. Yip, University of Washington

- **Teegi's so cute!"': Assessing the pedagogical potential of an interactive tangible interface for school children**

Stephanie Fleck (Université de Lorraine),
Charlotte Baraudon (Université de Lorraine),
Jeremy Frey (Ullo),
Thibault Laine (Inria, Bordeaux),
Martin Hachet (Inria Bordeaux)

- **Tangible Interaction in Parent-Child Activity: Encouraging Awareness and Reflection**

Ofir Sadka, Hadas Erel, Andrey Grishko, Oren Zuckerman
(Interdisciplinary Center)

- **When Toys Come to Life: Considering the Internet of Toys from an Animistic Design Perspective**

Bieke Zaman (KU Leuven),
Maarten Van Mechelen (TU Delft),
Lizzy Bleumers (Vrije Universiteit Brussel)

- **Printy3D: In-Situ Tangible Three-Dimensional Design for Augmented Fabrication**

Amanda K Yung, Zhiyuan Li, Daniel Ashbrook (Rochester Institute of Technology)

11:30-12:15 Panel: Ethics and responsible research in IDC

Christopher Frauenberger (TU Wien), Alissa Antle (Simon Fraser University),
Monica Landoni (University of Lugano), Janet Read (University of Central Lancashire), Jerry Alan Fails (Boise State University)

12:15-13:30 Lunch (provided)

13:30-15:00 Notes (3 parallel sessions)

Notes Session 1: Tangible and Touch Interaction (room “ EL21 ”)	Notes Session 2: Design Together (room “ EL5 ”)	Notes Session 3: Coding and Critical Design (room “ EL6 ”)
Session Chair: Kshitij Sharma, NTNU	Session Chair: Maarten Van Mechelen, TU Delft	Session Chair: Kate Howland, University of Sussex
“Wow He Is Talking!” A Study on Intrinsic Motivations for Child-Robotic Toy Interactions	Fun as a User Gain in Participatory Design Processes involving Children: a Case Study	Scratch Memories: A Visualization Tool for Children to Celebrate and Reflect on Their Creative Trajectories
Yasemin Dönmez (Middle East Technical University), Naz A.G.Z. Borekci (Middle East Technical University), Mathieu Gielen (Delft University of Technology)	Selina Schepers (KU Leuven), Katrien Dreessen (LUCA School of Arts / KU Leuven), Bieke Zaman (KU Leuven)	Shruti Dhariwal (MIT Media Lab)
Evaluating Elementary Student Interaction with Ubiquitous Touch Projection Technology	Co-designing Tablet Computer Applications with Sri Lankan Practitioners to Support Children with ASD	The Stamp Plate and the Kicking Chair: Playful Productivity for Meals in Preschools
Sarah Diesburg, C. Adam Feldhaus, Coved Oswald, Cole Boudreau, Beau Anthony Brown (University of Northern Iowa)	Amani I Soysa, Abdullah Al Mahmud, Blair Kuys (Swinburne University of Technology)	Ying-Yu Chen, Kelda Lee Baljon, Bonnie Tran, Daniela Rosner Rosner, Alexis Hiniker (University of Washington)
Designing for the ‘At home’ Experience of Parents and Children with Tablet Games	Towards Equity and Equality in American Co-Design: A Case Study	Critical design in interaction design and children – impossible, inappropriate or critical imperative?
Janet Read (University of Central Lancashire), Matthew Horton (University of Central Lancashire), Suzanne Clarke (BBC), Dan Fitton (University of Central Lancashire), Gavin Sim (University of Central Lancashire), Rhia Jones, (BBC)	Greg Walsh (University of Baltimore)	Netta Iivari (University of Oulu), Kari Kuutti (University of Oulu)
	Computer Mediated Playful Interactions: Investigating how variations in level of gaze effect children’s gameplay	Semi-Automatic Suggestion Generation for Young Novice Programmers in an Open-Ended Context
	Suleman Shahid (Lahore University of Management Sciences)	Michelle Ichinco (Washington University in St. Louis),

Paper Mechatronics: Present and Future

Hyunjoo Oh (University of Colorado Boulder),
Sherry His (Concord Consortium),
Michael Eisenberg (University of Colorado)
Mark D Gross (University of Colorado)

Light It Up: Using Paper Circuitry to Enhance Low-Fidelity Paper Prototypes for Children

Anneli Hershman, Juliana Nazare, Jie Qi, Martin Saveski, Deb Roy, Mitchel Resnick (MIT Media Lab)

Children creating Personas to diversify design perspectives and concepts for their own Tech Library

Helvi Wheeler (Namibia University of Science and Technology),
Heike Winschiers-Theophilus (Namibia University of Science and Technology),
Alessandro Soro (Queensland University of Technology),
Margot Brereton (Queensland University of Technology)

Caitlin Kelleher (Washington University in St. Louis)

Leo con Lula, introducing global reading methods to children with ASD

Javier Gomez (Norwegian University of Science and Technology),
Letizia Jaccheri (Norwegian University of Science and Technology),
Juan C Torrado (Universidad Autónoma de Madrid),
Germán Montoro (Universidad Autónoma de Madrid)

15:00-15:30 Coffee Break

15:30-16:00 Research Design Competition

Session Chairs: Kiley Sobel (University of Washington), Christopher Frauenberger (Vienna University of Technology)

- The Bits & Atoms of Play: Critical Engagements with Intercultural Meaning Making**

Ellie Bates, Kristy Evers, Lee Lewis, Jenny Zhou, Mina Vasalou (University College London), Vali Lalioti (The Innovation Consultancy), Kandase Augustin (Leeds Beckett)

- Create: A Platform for Pre-Adolescent Creativity and Collaborative Play**

Betsy Garwood, Nick Labate, Imana Onipe, Brian Tran (Kent State University)

- Culture Box: Education App on the World Through History and Time**

Ashley Griffith, Fredric Vigne, Jack McCormick, Shannon Kovach (Kent State University)

16:00-17:15 Papers session 5: Child-Robot Interaction

Session Chair: Vicky Charisi, European Commission

- **When Deictic Gestures in a Robot Can Harm Child-Robot Collaboration**

Elmira Yadollahi (EPFL),
Wafa Johal (EPFL),
Ana Paiva (University of Lisbon),
Pierre Dillenbourg (EPFL)

- **Measuring Young Children's Long-Term Relationships with Social Robots**

Jacqueline M. Kory Westlund, Hae Won Park, Randi Williams, Cynthia Breazeal (MIT Media Lab)

- **Bringing Letters to Life: Writing with Haptic-Enabled Tangible Robots**

Thibault Asselborn, Arzu Guneysu Ozgur, Khalil Mrini, Elmira Yadollahi, Wafa Johal, Ayberk Özgür, Pierre Dillenbourg (EPFL)

- **How smart are the smart toys? Children's and parents' agent interaction and intelligence attribution**

Stefania Druga, Randi Williams, Cynthia Breazeal (MIT Media Lab)

18:30 [Dinner at Kristiansten Fortress](#)

Friday 22nd June

8:00-9:00	Conference Registration (Elektrobygget “the Electro Building”, Gløshaugen campus)
9:00-10:00	Keynote: Teaching Children through innovation – experiences from EduApp4Syria and Kahoot!
10:00-10:15	Coffee Break

10:15-11:30 Papers session 6: Learning and Literacy

Session Chair: Elisa Rubegni, University of Lincoln

- **A Day in the Life of Jos: Web-based Game to Increase Children's Digital Literacy**

Sana Maqsood, Christine Mekhail, Sonia Chiasson (Carleton University)

- **Going Beyond Performance Scores: Understanding Cognitive-Affective States in Kindergartners**

Priyashri Kamlesh Sridhar, Samantha Wei Ting Chan, Suranga Nanayakkara (Singapore University of Technology and Design)

- **Designing to Illuminate Children's Scientific Funds of Knowledge Through Social Media Sharing**

Kelly Mills (University of Maryland),
elizabeth bonsignore (University of Maryland),
Tamara Clegg (University of Maryland),
June Ahn (New York University),
Jason Yip (University of Washington),
Daniel Pauw (University of Maryland),
Lautaro Cabrera(University of Maryland),
Kenna Hernly (University of Maryland),
Caroline Pitt (University of Washington)

- **Designing for Concreteness Fading in Primary Computing**

Anthony Trory, Kate Howland, Judith Good (University of Sussex)

- **A Survey of Computational Kits for Young Children**

Junnan Yu (University of Colorado Boulder),
Ricarose Roque (University of Colorado Boulder)

11:30-12:15 Announcing IDC 2019

12:15-13:30 Lunch (provided)

13:30-14:45 Papers session 7: Communication, Emotion and Engagement

Session Chair: Jerry Alan Fails, Boise State University

- **Children Asking Questions: Speech Interface Reformulations and Personification Preferences**

Svetlana Yarosh, Stryker Thompson, Kathleen Watson, Alice Virginia Chase (University of Minnesota),
Ashwin Senthilkumar (Eden Prairie High School),
Ye Yuan (University of Minnesota),
AJ Brush (Microsoft Research)

- **Children's Conversation with Experience: Making Colorful Imprints from Emotions**

Pauline Gourlet (Université Paris 8)

- **Overcoming Socio-Technical Challenges for Cross-Cultural Collaborative Applications**

Sumita Sharma (University of Tampere),
Pekka Kallioniemi (University of Tampere),
Tomi Heimonen (University of Wisconsin-Stevens Point),
Jaakko Hakulinen (University of Tampere),
Markku Turunen (University of Tampere),
Tuuli Keskinen (University of Tampere)

- **Why Doesn't It Work? Voice-Driven Interfaces and Young Children's Communication Repair Strategies**

Yi Cheng, Kate Yen, Yeqi Chen, Sijin Chen, Yiran Ni, Alexis Hiniker (University of Washington)

14:00-15:15 Closing Words

15:45- Swim in the fjord, see more information and register here:
<https://goo.gl/11dJNM>

END OF THE CONFERENCE

Demos and Art

- **Interaction Design Project Encouraging Contact Between Elderly and Children**
Irina Bjerkvold, Sabina Niewiadomska, Giovanni Pignoni, Yijie Zhou (Norwegian University of Science and Technology)
- **Deceptive Cadence**
Martin Palmer, Bella da Silva Buxbom, Jørgen Johan Wassvik (Norwegian University of Science and Technology)
- **Tree It: A Tangible User Interface for Constructing the Sample Space**
Connie Xiao, Jasmine Doan (Stanford University)
- **ClipWorks: A Tangible Interface for Collaborative Video Editing**
Allison Merz, Annie Hu, Tracey Lin (Stanford University)
- **Tingets: A System for Young Students to Communicate and Reflect**
Daniela Vainer, Andrew Utter (Stanford University)
- **The Storytellers Project**
Laura Boffi (Research La.B.)
- **Visualizing Platonic Solids with Augmented Reality**
Manuel Cerqueira (EST), Barbara Cleto (EST), João Martinho Moura (EST), Cristina Sylla (University of Minho)
- **Testudinata: A Tangible Interface for Exploring Functional Programming**
Claire Jia Yi Zau, Kritphong Mongkhonvanit, Chris Proctor, Paulo Blikstein (Stanford University)
- **Manipul8: An Interactive Experience to Inspire Pattern-Based Algebraic Thinking and Representational Fluency**
Kelly Boles, Livia Macedo, Chris Proctor, Paulo Blikstein (Stanford University)
- **domino: Mobile Phones as Accessible Microcontrollers**
Paulo Blikstein, Jenny Han, Kylie Jue, Aashna Shroff (Stanford University)
- **Tappetina's Empathy Game: A Playground of Storytelling and Emotional Understanding**
Sindre B. Skarås, Javier Gomez, Letizia Jaccheri (Norwegian University of Science and Technology)
- **Exploring Computational Thinking Through Collaborative Problem Solving and Audio Puzzles**
Anna Jordan-Douglass, Vishesh Kumar, Peter Woods (University of Wisconsin-Madison)
- **AssisT-Task: A Smartphone Application to Support People with Cognitive Disabilities in Their Daily Life Activities**
Javier Gomez, Juan C. Torrado, Germán Montoro (Universidad Autónoma de Madrid)
- **Paper Piano: Making Circuits With Everyday Things**
Sharon L. De La Cruz, Aatish Bhatia (Princeton University)
- **Inside Out: Teaching Empathy and Social-Emotional Skills**
Dana L. Kralicek, Lisa Von Rabenau, Swati Shelar, Paulo Blikstein (Stanford University)
- **Patchwork: An Expressive e-Textile Construction Kit**
Amanda R. Boone, Eileen Rivera, Jacob Wolf (Stanford University)

Late Breaking / Work in Progress

- **Exploring how children interact with 3D shapes using haptic technologies**
Nikoleta Yiannoutsou, Rose Johnson, Sara Price (University College London)
- **An Exploratory Study of Children's Online Password Behaviours**
Sumbal Maqsood, Sana Maqsood, Robert Biddle, Sonia Chiasson (Carleton University)
- **DBugs: large-scale artefacts for collaborative computer programming**
Marie A Boden, Bianca Pretorius, Ben Matthews, Stephen Viller (University of Queensland)
- **Deep Making: Curricular Modules for Transferable Content-Knowledge and Scientific Literacy in Makerspaces and FabLabs**
Yoav Bergner, Ofer Chen (New York University)
- **Multisensory storytelling: A Co-design study with children with mixed visual abilities**
Clare Cullen, Oussama Metatla (University of Bristol)
- **Introducing Children to Machine Learning Concepts through Hands-on Experience**
Tom Hitron, Hadas Erel, Iddo Yehoshua Wald, Oren Zuckerman (The Interdisciplinary Center)
- **Empowering Children to Author Digital Media Effects for Reader's Theatre**
Pedro Ribeiro (Rhine-Waal University of Applied Sciences), Cristina Sylla (University of Minho), Anna Michel (University of Applied Science Kleve), Ido Iurgel (Rhine-Waal University of Applied Sciences), Christian Ressel (Rhine-Waal University of Applied Sciences), Wolfgang Mueller (University of Education Weingarten)
- **The Telling Board: An Interactive Storyboarding Tool for Children**
Denise Powell, Peter Gyory, Ricarose Roque, Annie Bruns (University of Colorado Boulder)
- **Investigating Query Formulation Assistance for Children**
Oghenemaro Anuyah, Jerry Alan Fails, Maria Soledad Pera (Boise State University)
- **Fostering civic engagement through native maps: a preliminary study**
Fabio Campos (New York University), Leiny Garcia (Stanford University)
- **Design considerations for family-centered health management: Preliminary findings with pediatric BMT patients**
Ji Youn Shin, Jacob Kedroske, Rebecca Vue, Roshun Sankaran, Dima Chaar, Tracey Churay, Sung Won Choi (University of Michigan)
- **A Little Bit of Coding Goes a Long Way: Effects of Coding on Outdoor Play**
Netta Ofer, Hadas Erel, Idan David, Tom Hitron, Oren Zuckerman (The Interdisciplinary Center)
- **Teaching News Literacy to Children with Digital Games**
Ioli Campos, André Sardo (Nova University of Lisbon)
- **AR-Maze: Tangible Programming Tool for Children Based on AR Technology**
Qiao Jin, Danli Wang, Xiaozhou Deng, Nan Zheng (Chinese Academy of Sciences), Steve C. Chiu (Idaho State University)
- **Storytelling Shapes: A Toolkit to Enable Children to Express their Needs and Wishes**
Michael Soenthorn Speek, Maarten Van Mechelen (Delft University of Technology)
- **My Doll Says It's OK: A Study of Children's Conformity to a Talking Doll**
Randi Williams, Christian Vazquez, Stefania Druga, Cynthia Breazeal, Pattie Maes (MIT Media Lab)
- **Eliciting Social Biases in Children via Tangible Games**
Saad Jamal, Mehr-un-Nisa Arif Kitchlew, Meher Fatima Zaidi, Suleman Shahid (Lahore University of Management Sciences)

- **Dancing to Design: A Gesture Elicitation Study**
Tiffanie R. Smith, Juan E. Gilbert (University of Florida)
- **Code Notes: Designing a Low-Cost Tangible Coding Tool with/for Children**
Alpay Sabuncuoglu, Merve Erkaya, Oguz Turan Buruk, Tilbe Goksun (Koc University)
- **Should I answer what the atom feels? Learning about Forces in Chemical Bonding Using ELI-Chem Simulation**
Asnat R. Zohar, Sharona T. Levy (University of Haifa)
- **Don't Steal My Balloons: Designing for Musical Adult-Child Ludic Engagement**
Duri Long, Hannah Guthrie, Brian Magerko (Georgia Institute of Technology)
- **Plan&Do - A Technology Probe Supporting Children with Intellectual Disabilities in Leisure Activities**
Eva Eriksson (Aarhus University Chalmers University of Technology), Olof Torgersson (University of Gothenburg), Annika Melin (Språkbussen)
- **Developing Children's Empathy in Co-design Activities: A Pilot Case Study**
Maarten Van Mechelen, Alice Schut, Mathieu Gielen, Remke Klapwijk (Delft University of Technology)
- **Blended Making: Multi-Interface Designs and E-Crafting with Elementary and Middle School Youth**
Gabriela Richard, Sagun Giri, Zachary McKinley, Robert W Ashley (Pennsylvania State University)
- **Exploring the 3D Printing Process for Young Children in Curriculum-Aligned Making in the Classroom**
Alexander Berman, Elizabeth Deuermeyer, Beth Nam, Sharon Lynn Chu, Francis Quek (Texas A&M University)
- **Game Modding for Computational Thinking: An Integrated Design Approach**
Chronis Kynigos, Marianthi Grizioti (University of Athens)
- **Maintaining Long-Distance Relationships with Children: Exploring Autobiographical Designs and Lifelogging**
Grace Ataguba (University of Lincoln)

Program at Glance

	Tuesday	Wednesday	Thursday	Friday
8:00	Registration	Registration	Registration	Registration
9:00		Keynote 1	Keynote 2	Keynote 3
10:00	Workshops, Courses, DC	Paper session 1	Papers session 4	Papers session 6
11:30		Demos & art firehose	Panel on Ethics	Announcing IDC 2019
12:30	Lunch	Lunch	Lunch	Lunch
13:30		WiP firehose	Notes	Papers session 7
14:00	Workshops, Courses, DC	Paper session 2	Notes	Closing Words
15:30		Demo & art / WiP exhibition	R&D Competition	
16:30		Paper session 3	Papers session 5	
17:30	Ice-breaker at the Science Museum			
18:30		Pipe organ recital in Nidaros Cathedral	Dinner at Kristiansten Fortress	
19:30		Reception to To tårn		

Maps

- Google map links for the social events:
 - Science Museum: <https://goo.gl/maps/bu5Nj59LFjH2>
 - Kristiansten Fortress: <https://goo.gl/maps/oeJxTaadbvM2>
 - Nidaros Cathedral: <https://goo.gl/maps/JkZzipyyk2m>

Google map link to find your way to the conference venue (i.e., Elektrobygget “the Electro Building”, at Gløshaugen campus: <https://goo.gl/maps/s65CV9zJaX82>

You can also use Mazemap (<https://use.mazemap.com/>) to navigate inside the campus.

For Elektrobygget on Mazemap, either use this url: <http://bit.ly/2G0Rr0T>

or scan the following QR code.

