

| DAY 2: 22 March 2017   |   |  |   |  |  |  |
|--|---|--|---|--|--|--|
| 08:30-09:15 <i>Waking up:</i> with Coffee & Tea — THEATERFOYER —   |   |  |   |  |  |  |
| ROOM   | PANORAMA LOUNGE   | FOYER 2 <sup>ND</sup> BALCONY  | FOYER 1 <sup>ND</sup> BALCONY   | THEATERZAAL  | ROOM 1   | ROOM 2   |
| <b>Parallel tracks</b>   | <b>Integrated Systems and Circuits</b> (by ProRISC)   | <b>Semiconductor Advances for Future Electronics and Sensors</b> (by SAFE)   | <b>Embedded Systems</b> (by PROGRESS)   | <b>Computer Science</b> (joined session by ASCI, IPA, SIKS)  |  | <b>Ethics in Computer Sciences</b>   |
| 9:15-9:40  | <b>Hugo Westerveld</b> , (University of Twente) A Cross-Coupled Switch-RC Mixer-First Receiver with 41dBm IIP3  | <b>Vishal Agarwal</b> , (University of Twente) Random Telegraph Signal phenomena in avalanche diodes   | <b>Sila Ozen Guclu</b> , (Eindhoven University of Technology) Trust-based Neighbor Unreachability Detection for RPL                         | <b>Alexandru Iosup</b> et al., (Vrije Universiteit Amsterdam) The OpenDC Vision: Towards Collaborative Datacenter Simulation and Exploration for Everybody — <b>Giulio Stramondo</b> et al., (University of Amsterdam) On the Effectiveness of Custom Parallel Memories — <b>Shanshan Ren</b> et al., (Delft University of Technology) GPU Acceleration of GATK HaplotypeCaller — <b>Bram Veenboer</b> et al., (ASTRON) Efficient Imaging in Radio Astronomy Using GPUs — <b>Alberto Corvo</b> et al., (Eindhoven University of Technology) PATHONE: From One Thousands Patients to One Cell   |  | <i>Invited speaker: Jan Bergstra</i> (UvA), ERBI – Ethical Review Boards for Informatics Research  |
| 9:40-10:05   | <b>Martin van Leussen</b> , (Eindhoven University of Technology) Reconfigurable Support Vector Machine Classifier with Approximate Computing              | <b>Ronald Stoute</b> , (Delft University of Technology) CMOS compatible Embedded Microchannels   | <b>Martijn Schoot Uiterkamp</b> , (University of Twente) Robust Online Planning of On/off-devices in Demand Side Management                 |  |  | <b>Marlou Bijlsma &amp; Tamar Zijlstra</b> (NEN) Ethics Committees: Good Practices Set the Standard  |
| 10:05-10:20 <i>Coffee Break</i> — THEATERFOYER —   |   |  |   |  |  |  |
| 10:20-10:30 <i>Welcome by chair of the day: Jurgen Vinju</i> — THEATERZAAL —                             |   |  |   |  |  |  |
| 10:30-11:30 The Dutch Prize for ICT Research 2017 Award Ceremony (handed over by <b>Louise Gunning</b> ) |   |  |   |  |  |  |
| 11:30- 11:55   | <b>Else Kooi prijs: Dr Massoud Tohidian</b> (Foyer2 <sup>nd</sup> balcony)  |  | <b>Zhou Lu</b> , (University of Twente) Co-Simulation Design Using Functional Mock-up Interface: Towards Cyber-Physical Robotic Application | <b>Han Kruijer</b> et al., (University of Groningen) Using t-SNE for Graph Drawing — <b>Nicola Pezzotti</b> et al., (Delft University of Technology) Hierarchical Stochastic Neighbor Embedding for the Exploratory Analysis of Large High-Dimensional Data  |  | <b>prof. Aiko Pras</b> (University of Twente) & <b>Jeroen van der Ham</b> (University of Amsterdam) Ethics Committees in Informatics: Case Studies UTwente & UvA   |
| 11:55-12:20  |   |  | <b>Guus Kuiper</b> , (University of Twente) Latency Analysis of Homogeneous Synchronous Dataflow Graphs Using Timed Automata                | <i>Invited Speaker: Marc van Kreveld</i> (Utrecht University) 11.50-12.20 hrs. Geometric Measures for Geometric Data Analysis and Geometric Content Generation   |  | <i>Panel discussion on implementing ethics committees in informatics: prof. Aiko Pras</i> (University of Twente) — <b>prof. Philip Brey</b> (University of Twente) SATORI project — <b>Jan Piet Barthel</b> (NWO) — <b>Jeroen van der Ham</b> (University of Amsterdam) <i>Moderated by: Roland van Rijswijk-Deij</i>  |
| 12:20-13:30 <i>Lunch: Poster &amp; Meet the Demo, Information stand NWO and IPN</i> — THEATERFOYER —     |   |  |   |  |  |  |
| 13:30-14:15 <i>Keynote speaker: Erik Vinkhuyzen</i> Autonomous Driving — THEATERZAAL —                   |   |  |   |  |  |  |
|  |   |  |   | <i>Theme session: Data Science</i>   | <i>Theme session: Health</i>   |  |
| 14:20-14:45  | <b>Dirk van Ormondt</b> , (Delft University of Technology) Integral Processing of Two-dimensional Hyperpolarised 13C-MRS Data Directly in the Time-domain |  | <b>Luc Waeijen</b> , (Eindhoven University of Technology) Layer Fusion in CNNs to Minimize External Memory Accesses                         | <b>Bram Cappers</b> et al., (Eindhoven University of Technology) Semantic Network Traffic Analysis using Deep Packet Inspection and Visual Analytics — <b>Vincent Gong</b> et al., (Delft University of Technology) Attendees Density Estimation Using Social Media in City Scale — <b>Event Stijn Heldens</b> et al., (University of Twente) HyGraph: High-Performance Graph Processing on Hybrid CPU-GPU Platforms — <b>Huan Zhou</b> et al., (University of Amsterdam) A Network Transparent Solution for Flexibly Provisioning Connected Virtual Infrastructure Across Multiple Data Centers — <b>Gijs Overgoor</b> et al., (University of Amsterdam) Brand Popularity Prediction Using Spatio-Temporal Brand Representation | <i>ICT with Industry</i><br>14:20–14:25 hrs: <b>Arend Rensink</b> : Opening<br>14:25–14:35hrs: <b>Joost Bosman</b> , ING: Sustainable agility by managing IT systems entropy<br>14:35–14:45 hrs: <b>Leon Gommans</b> , KLM: Digital Market Places (with Thales)<br>14:45–14:55 hrs: <b>Jan de Sonnevill</b> , VLPB: Using big data in plant breeding<br>14:55 –15:05 hrs: <b>Wouter Poncin</b> , SNS: Code coverage improvement of database-centric applications<br>15:05 - 15:10 hrs: <b>Merlijn Jacobs</b> , Scientific Coordinator Lorentz Center | 14.20–14.30 hrs<br><i>Introduction to C2D call Health: Astrid Zuurbier</i> (NWO)<br><br>14.30–15.10 hrs<br><i>Invited Speaker: Marleen de Bruijne</i> (Erasmus MC)   |
| 14:45-15:10  | <i>Short invited: Yao Liu</i> , (Delft University of Technology) Low Power wireless IoT circuits  | <b>Andreas Bahr</b> , (Hamburg University of Technology) Semiconductor Technology Selection for Electronic Implants                              | <b>Alessandro Frigerio</b> , (Eindhoven University of Technology) An introduction to Self-Driving Cars Technologies                         |  |  |  |
| 15:10-15:30 <i>Break: Poster &amp; Meet the Demo</i> — THEATERFOYER —                                    |   |  |   |  |  |  |
| 15:30-16:00  |   | <b>Yu Xin</b> , (Delft University of Technology) Horizontal and Vertical Tapered Waveguides for Evanescent Wave Sensing                          |   | <b>Paul van der Corput</b> , (Eindhoven University of Technology) Interactive Visualization of High-Dimensional Data   |  | <b>Ronald Siebes</b> et al., (VU University) Drug Discovery and Big Linked Data — <b>Fields Sreejita Ghosh</b> , (University of Groningen) Computer Aided Diagnosis Under the Influence of Heterogeneous Data and Imbalanced Classes — <b>David Katzmarek</b> , (Hamburg University of Technology) New Data Recording Plugin for the Integration of an Integrated Circuit for Neural Recordings into the Open Source Electrophysiology User Interface Open Ephys |
| 16:00-16:25  | <i>Invited Speaker: Jan Prummel</i> , (Dialog Semiconductor) Interference robust low-power radios for IoT   | <b>Pablo Mendoza Ponce</b> , (Hamburg University of Technology) Trade-off Study on Switched Capacitor Regulators for Implantable Medical Devices | <i>Invited speaker: Said Hamdioui</i> (Delft University of Technology) Computation for the Future: Beyond CMOS and Beyond Von-Neumann       | <i>Invited Speaker: Reynold Xin</i> : Simplifying Big Data with Spark 15.40u-16.25 hrs.  |  |  |
| 16:30-17:00 <b>Award ceremony, closing ceremony</b> — THEATERZAAL —                                      |   |  |   |  |  |  |

## Welcome to ICT.OPEN2017!

Our society depends on Information and Communication Technology. It takes care of all aspects of our life, such as social media, finance, transport, etc. The ICT.OPEN conference offers a meeting place for the growing ICT research community in the Netherlands. This is the place where ICT researchers meet, present, and demonstrate their latest research results.

ICT.OPEN is a federated conference, however this year a number of the Dutch research schools (IPA, ASCI and SIKS) decided to join forces and organise a joined session. Furthermore, a number of theme sessions, on **Cyber Security**, **Data Science**, **Health**, and **Machine Learning** are organised to bring together ICT researchers working on these themes. The programme also offers a challenging track on **Ethics in Computer Science**. Finally, we present three exciting sessions in **Quantum Computing**, **Business Start-up** and **Innovation** and **ICT with Industry**. Throughout the programme, presentations submitted by Dutch researchers alternate with invited talks from highly senior experts from industry and academia.

We are very lucky to have **Prof. Dr. Barbara Terhal** from RWTH Aachen University as keynote speaker on quantum computing and **Dr. Erik Vinkhuyzen** from Nissan Research Centre (Silicon Valley) as keynote on autonomous driving. The winner of the Else Kooi Award 2017, **Dr. Massoud Tohidian**, will present his work. On top of that the winner of the Dutch Prize for ICT Research 2017, **Dr. Peter Schwabe**, will give a plenary talk.

ICT.OPEN is exemplary for what the research community as a whole should always be: open, inviting and collaborative. There is no competition for research funds, no prioritisation of a select few among a mass of excellent researchers. Everyone can show their latest research results, by means of a presentation, poster and/or demo. Yet, there is a competition for the best poster and demo.

ICT.OPEN would not have been possible without NWO, aided by IPN, the ICT Research Platform for the Netherlands and the research schools and programmes ASCI, IPA, SIKS, SAFE, ProRISC and PROGRESS and the Cybersecurity and Intelligent Systems communities.

However, I want to thank the people at NWO in particular, who kept the organisation going and ensured that the researchers delivered all required input on time. They did a fantastic job. I cannot thank you enough.

Still, we welcome suggestions on how ICT.OPEN can still be improved for the years to come!

Enjoy the conference!

On behalf of the organisation committee,

**Mark van den Brand**, chair of ICT.OPEN2017 committee

