



DISSEMINATE

An insight into digital media
and communication



Partners



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Preface

Dear visitor,

I would like to wholeheartedly welcome you to Symposium Disseminate! The 3rd of March will be a day full of interesting talks in which you will learn much about digital media.

Disseminate is a different symposium than the ones *Inter-Actief* is used to. Beginning in May 2020, my committee has been working hard to organize a symposium in the best way possible. We have had many setbacks due to the corona pandemic but are proud of what we have managed to achieve and can deliver you today.

This booklet will introduce you to the day ahead of you. We offer you many talks about all kinds of topics related to digital media. Everything from the influence of fake news to efficient video codecs. I wish you a fantastic day and can only hope you will have as much fun experiencing our symposium as we had organizing it.

On behalf of everyone in the committee, have fun!

Wesley Joosten
Chairman



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Committee



Wesley Joosten
Chairman

Matthias Wentink
Secretary & Promotion



Max Jeltes
Treasurer

Niek Pennings
Speakers



Bram van Dartel
External Affairs

Pim Mulder
External Affairs &
Website



Bart Leenheer
Logistics

Willem Schooltink
Board Representative



Disseminate

Dis•sem•i•nate

Adjective /dɪ'sɛmɪ,neɪt/

Spread (something, especially information) widely.

For all times judgement has been based on information and expectancy; What will my neighbour think of this, and what happened yesterday that may influence my choices today?

Currently, it takes mere seconds to discover what is happening when. Symposium Disseminate will examine the increasing speed of our media: What is the effect of pacier media, how does the system create a seamless experience, how do we act on threats and opportunities, and what is there to come? During this event, we hope to give an incentive to the audience to start thinking about the way they are approached by organisations, and how they react to it.



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Committee of Recommendation



Prof. Dr. Thom Palstra
Former Rector Magnificus
University of Twente



Prof. Dr. Ir. Arend Rensink
Programme Director Computer
Science
University of Twente



Prof. Dr. Maria Iacob
Programme Director Business
Information Technology
University of Twente

welcome [challenge]

Do you have a passion for technology and do you love to code? Join us! You can work on [challenging] assignments.



We offer

- [student] developer job
- [excellent] graduation place
- [great] starter function as [software] engineer

Ps: you can walk on socks at our office.

werkenbijsst.nl

 software

Programme

Timeslot Main Stage Side Stage

09:15 – 09:45

Walk In

09:45 – 10:15

General Opening

10:15 – 11:15

Coen van de Ven:
Instagram
Conspiracy
Theories

Desmond
Frencken:
Holographic
Technologies

11:15 – 11:30

Coffee Break

11:30 – 12:30

Ringo Ossewaarde:
The Political and
Economic
Dimensions of
Digital
Transformation

Benjamin Bross:
Evolution and
revolution of video
compression in the
new versatile video
coding standard
(VVC)

12:30 – 13:30

Lunch Break

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13:30 – 14:30

Ella Velner &
Thomas Beelen:
Children in the
Digital World

14:30 – 14:45

Early Afternoon
Break

14:45 – 15:45

Stefan van der
Spek & Hans
Hoogenboom: New
VR Applications

Alexander van
Wijnen: The
Industrial
Revolution of the
Information Era

15:45 – 16:00

Late Afternoon
Break

16:00 – 17:00

André Calero
Valdez: The Spread
of Disinformation

17:00 – 17:15

Closing

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Hosts

Kimberly studied in Enschede until not too long ago, and was a board member of *Inter-Actief*, so you might already know her. If not, you will get to know her as the host of symposium Disseminate! Kimberly has a background in Cyber Security, but dabbled in both CS and BIT bachelors before that, so you'll be sure to find some connection with her throughout the day. She now works as an advisor on all things Cyber Security related for the Dutch government ensuring the digital safety of the Netherlands.



Kimberly Hengst

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One may know Lindsay from our home base *Inter-Actief*. She is active in computer science education, promotion and all things in between. With an active career -- such as a Google scholarship and an AI publication -- Lindsay has found her way to many tech events. This way, she can shed light on the many assets of our field, from research to business to our community. Her machine learning specialization is multimedia data, a key part of digital communication. In these unnatural times, building a human connection is very difficult without images, videos or speech. Soon, Lindsay will start her Master thesis at Sony to research how we can add human expressiveness to speech generation.



Lindsay Kempen

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Instagram Conspiracy Theories

Two years ago, Dutch weekly De Groene Amsterdammer decided to unite with scientists and independent researcher-specialists in troll-behaviour to set up a series of investigations into how public debate online is being shaped and influenced by algorithms, disinformation campaigns and bots. In this talk, the focus is on how influencers on Instagram spread alternative corona-theories and what is their impact? Weeks of scraping and in-depth interviews led to a description of what 'new conspiracy thinking' looks like – and why it is so popular among young people on Instagram.

Coen van de Ven is editor for De Groene Amsterdammer. Choosing between his book or going out on the street was never an easy choice for Coen. First, he studied journalism in Utrecht and later on political theories in Edinburgh. The last few years he has been writing stories for various different media outlets like Al Jazeera, Vrij Nederland, De Morgen and RTL Z. While he was writing these stories, he travelled from Srebrenica to Beijing and back to Athene. For De Groene he also wrote a story about the heavily militarised border of Kaliningrad. Coen will try to be wherever people and politics meet each other.



Coen van de Ven
De Groene Amsterdammer

Holographic Technologies

If you've ever seen a hologram in a movie, there is a high probability that it was added later as a special effect. But that might not be the case anymore in the future if it is up to Vision2Watch. Although still a lot needs to be done in the field and technology isn't quite like what is possible in special effects, Vision2Watch certainly is one of the frontrunners on this technology. In this talk, Desmond will show us the technology they created at Vision2Watch and some of the awesome projects they have done.

Desmond is owner and founder of Vision2Watch. Although he himself mostly has a career in sales, he is the creative mind behind all the projects Vision2watch has done so far. Together with his colleague Rogier he forms the main core of the team that delivers unique solutions for customers.



Desmond Frencken
Vision2Watch

The Political and Economic Dimensions of Digital Transformation

In the digital age, digital processes are so deeply embedded in the daily life of information capitalism that people barely realize they interact with devices and operate machines. Digital transformation is not a 'neutral' process but is invested with all sorts of political and economic interests. Political-administrative actors, like governments, politicize digital transformation in general and AI in particular, and invest digital transformation with myths, utopian visions and solutionist expectations. Also, digital transformation is to some extent a Silicon Valley-driven process, which is to say that digital transformation is hijacked by the giant tech firms. And such powers tend to describe digital transformations in line with their own myths and metaphors that are not interest-free. In his contribution, Ringo Ossewaarde reveals the bias in the current politicization and economization of digital transformation.

Ringo Ossewaarde is an associate professor in governance, society & technology at the University of Twente (Faculty of BMS). He is the Head of the Department of Public Administration. There he has published on a variation of topics outside of the computer science field, but he also wrote interesting opinions on the west European politics of AI. His views will provide a different yet refreshing perspective on topics we are all familiar with.



Ringo Ossewaarde
University of Twente

(R)evolution of Video Compression in the new Versatile Video Coding Standard

Versatile Video Coding (VVC) is the most recent jointly developed video coding standard by ITU-T (H.266) and ISO/IEC (MPEG-I Part 3). VVC is designed to be both efficient and versatile to address today's media needs. This includes approximately 50% bit-rate reduction over H.265/HEVC as well as versatility by efficient coding of a wide range of video content and applications. In this talk, video coding techniques are reviewed including tools representing an evolution of known techniques, but also more revolutionary tools developed using machine learning.

Benjamin Bross is a project manager at the Image Processing department of the Fraunhofer Institute for Telecommunications - Heinrich Hertz Institute, Berlin. He received the Dipl.-Ing. degree in electrical engineering from RWTH University Aachen, Germany in 2008. His research interests include motion estimation/prediction, residual coding and fast encoding techniques. Since the development of the new High-Efficiency Video Coding standard, H.265, has started in 2010, he has been very active in the standardization process as a technical contributor and coordinator of core experiments. In July 2012, he was appointed as co-chair of the editing ad hoc group and became the chief editor of the H.265 video coding standard.



Benjamin Bross
Fraunhofer HHI

Children in the Digital World

When we search online for information, we increasingly encounter 'conversational social agents' that try to help us, or even robots addressing us in the physical world. Children are also exposed to these agents, but we know very little about how children should preferably be addressed in such a conversation. The Child-Robot Media Interaction project funded by SIDN fund and CLICKNL investigates how we should design child-robot interaction in a responsible way: not only chatty and informative in a way that children like and understand, but also responsible by design. The project is a collaboration of University of Twente, Netherlands Institute for Sound and Vision, and Wizenoze.

Ella Velner has a bachelor's degree in communication and Information Sciences from VU Amsterdam. There, she learned about linguistics, communication forms and theories and about media and how to analyse it. Thereafter she obtained a master's degree in information systems from the University of Amsterdam, graduating with a thesis on intonation in robot speech.



Ella Velner
University of Twente

New VR Applications

VR and AR are core products in (serious-) gaming environments. Nevertheless, in Architecture and Urban Design these technologies are rarely used. Stefan & Hans decided to change that by introducing VR and AR into their design methodology in the 'Computational Design' pilot track as part of a BSc design studio: both VR/AR tools were used from day one and are a main component of the daily design process. Education was not the only domain for VR/AR in Architecture and Urban Design. It was also used in a project to improve health and well-being by spatial design, where residents could give feedback on designs for a shopping mall by seeing it in VR. During the talk Stefan will elaborate on the examples given, while Hans will explain from a technological point of view how they managed to do this and how their workflow looks like.

Stefan van der Spek and Hans Hoogenboom are both part of the Architecture and Built environment faculty at the TU Delft. At the faculty they are part of the VR-Lab. There they lead a team that "houses one of the best academic labs in virtual reality when it comes to visual representation". The VR-Lab preoccupies itself with creating a new experience and way of teaching for the students. Stefan and Hans believe that by allowing students to experience their creations in VR, they have created an essential part of the design process for their students.



**Stefan van der Spek
& Hans Hoogenboom**
TU Delft



The Industrial Revolution of the Information Era

Modern technology has come a long way, but it still is very new. Every day we are exploring new possibilities. Who would've thought in 1950 that right now we can call someone across the globe and have a real time conversation? Or that some cars can drive themselves. Although most changes have had a positive impact, we are still figuring out how we should respond to the change. We are seeing giant tech companies like Facebook and Google who go about their business almost unrestricted. Alexander will compare our age of technology to the industrial revolution. In both time periods we saw companies rising, industry booming, but where the current laws failed to regulate the growing industry, there has always been someone to take advantage of it.

Alexander has studied public policy, history of international relations, and philosophy in the Netherlands and Singapore. Currently Alexander is Researcher & Strategist at FreedomLab. It is a think tank that conducts research on the future of technology, economics, politics, and society. In his research, Alexander focuses on geopolitical shifts, technology and culture. He is a public speaker and his ideas have been published in Het Financieel Dagblad, NRC Handelsblad, and Volkskrant.



Alexander van Wijnen
FreedomLab

The Spread of Disinformation

During this age of information, we are flooded with information. It is hard to decide what is relevant and what is not. It is also difficult to determine what is real and what is not. There are people who abuse this to spread disinformation. Technology like social bots make this jungle of information even denser. But are the people who intentionally want to cause harm the only ones to blame? What about the algorithms behind the social platforms or what about the people who spread the disinformation not knowing it is fake? André will share his knowledge about the spread of disinformation. In his talk he will explain how the different components come together.

André Calero Valdez is Senior Researcher at the Chair of Communication Science and Human-Computer Interaction Center at RWTH Aachen University. He studied computer science at RWTH Aachen University, specializing in software engineering and psychology. Since 2013, André has been working as a post-doctoral fellow at RWTH and deals with the interface between algorithms and humans in different application areas. He works in the fields of empirical social research, technology acceptance, eHealth, industry 4.0, recommendation systems, information visualization and social media. Since 2018 André is the research group leader of the junior research group Digitale Mündigkeit. In this research group, the interaction of recommendation algorithms, social bots, and fake news in social media are investigated.



André Calero Valdez
RWTH Aachen University

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Thank you
For visiting

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