



CTIT Newsletter – July 2013

News

CTIT

[Stimulating research group's activities](#)

CTIT intends to stimulate several research group's activities. A special budget has been reserved for this (information in Dutch).



[Research Professional](#): the new UT system for research funding possibilities

The University of Twente has acquired a new system for (international) research funding possibilities: Research Professional. In it, practically all funding possibilities are mentioned. Every UT researcher can register. However, it is strongly advised that you make your own profile, since there is an overwhelming amount of information (see also UT's info page on: <http://www.utwente.nl/subsidies/researchprofessional/>).



[Meet Johnny Hartz Søraker....](#)

Dr. Johnny Hartz Søraker is temporarily taking over the activities of Aimee van Wynsberghe as ethical advisor of CTIT, as Aimee is on maternity leave until October 2013. You can contact him for all ethical issues concerning your research.



12 November 2013: Information Meeting on Horizon 2020

Please note this meeting in your agenda! There is not yet a programme available, but we will inform you about it a.s.a.p. The information meeting will be held together with the national event "[Innovatie Estafette 2013](#)" Location: RAI Amsterdam.

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[Math students developed a simulation program to predict extreme rain fall](#)

Just one day after the flood in Enschede, June 20th, math students Ruben Fransen, Loes Knobens and Maarten Otten presented a simulation program that is able to predict extreme rain fall. They worked on it for a half year under the guidance of prof. Bernard Geurts (EWI/MACS) and Anne Remke (EWI/DACS) (information in Dutch)



[STW Valorization Grant for Q-Able](#)

UT-researchers Kien Tjin-Kam-Jet, Djoerd Hiemstra and Dolf Trieschnigg (EWI/Database group), with their company Q-Able, acquired a STW Valorization Grant for their train planning system, that was developed last year.



[CTIT philosopher Mark Coeckelberg in EenVandaag on robotising the battlefield.](#)

Robots and drones on the battlefield open up new ethical questions. In the ty program EenVandaag CTIT philosopher Mark Coeckelberg talks about questions such as 'How does a robot decide on life and death' and 'If it all goes wrong, who's responsible'.

News: [NWO invests with Indian government and companies in ICT research](#)



Central research themes are **Big Data** and **Gaming**.

Source: NWO Website.



[Cooperative programme STW/NWO on Embedded Systems](#)

STW and NWO have made a budget of 2.5 M-€ available within the Roadmap HTSM Embedded Systems. Opening Call is on **June 25, 2013**.



Zin'nZin

New storytelling training for PhDs

Researchers work very hard to obtain good results and new insights. How they **communicate** these results strongly determines the **impact** of their work. Good communication requires thorough preparation: building a **clear and convincing story** from **complex content** is not easy. Students from **eleven different UT research groups** have already participated in this [training](#). On 20 and 27 September 2013 the next course will take place.

Agenda

- July 3-5, 2013: [FUNEMS 2013](#) - Future Network & Mobile Summit (European Union). Location: Lisbon, Portugal
- November 12, 2013: [Innovatie Estafette 2013](#). Location: RAI Amsterdam
- November 12, 2013: [Information Meeting Horizon 2020](#). Location: RAI Amsterdam (information to be provided)
- November 25 – December 1, 2013: [European Robotics Week](#). Several locations.

PhD defences

August 28, 2013	Xian Qiu (EWI/DMMP): 'Fractional programming in cooperative Games'
August 28, 2013	Dongshuang Hou (EWI/DMMP): 'Models, Theory and Applications in cooperative Game Theory'
August 28, 2013	Yuan Feng (EWI/DMMP): 'Extensions of the Shapley Value and their Characterizations'

Information on research funding programs



The EU started a [website on Horizon 2020](#).

Financial aspects:

Decisions on the budget and funding schemes will be taken mid 2013. Most probably, the overall budget will be decreased to 70 billion euro. In funding, rules will become more simple. It is expected that the real indirect costs scheme will not be continued. Funding will then be on basis of 100% of direct research costs + 25% indirect costs.



[Artemis Call 2013](#)

The Artemis Call 2013 has recently been opened.

Deadline proposal submission: June 6, 2013.

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Upcoming deadlines

Continuously:

- NWO [Aspasia](#) (Female researchers in science / by nomination) (*information in Dutch*)
- [STW Open Technology Programme](#) (*information in Dutch*)
- [Free Competition Humanities](#) (*information in Dutch*)
- *N.B. Free Competition Exact Sciences is closed!*

August:

- 14-8-2013: [Marie Curie International Incoming Fellowships](#)
- 14-8-2013: [Marie Curie International Outgoing Fellowships](#)
- 16-8-2013: [Marie Curie Intra-European fellowships for Career Development](#)
- 27-8-2013: [TOP subsidy Exact Sciences](#) (NWO) – full proposals Compartment 1
- 28-8-2013: [NWO Middelgroot](#)
- 29-8-2013: [NWO Vici Alfa/Gamma](#) (on invitation)
- 29-8-2013: [NWO Vici Beta](#) (on invitation)

September:

- 12-9-2013: [ENIAC Call 8 \(full project proposals\)](#)
- 12-9-2013: [CATRENE](#) full proposals
- 18-9-2013: 2nd Call for the [Joint Programme Initiative Urban Europe](#)
- 24-9-2013: [Eureka/Euripides Call](#) (R&D programme dedicated to interconnection, packaging, miniaturisation of electronic systems or devices, silicon sensors and integration of all electronic systems)
- 30-9-2013: The [NWO Top Grant](#) Social & Behavioural Sciences, Research proposals.

October

- 2-10-2013: [STW Valorization Grant](#)
- 3-10-2013: [Call for proposals for ERC Proof of Concept](#) (Final)
- 10-10-2013: [NWO Data Science: ICT Industrial Partnership Programme](#) (full proposal)
- 14-10-2013: [Celtic Plus Autumn Call](#)
- 18-10-2013: [Marie Curie Career Integration Grants](#)
- 31-10-2013: [ITEA2](#) full proposals
- 31-10-2013: [NWO Indo Dutch Science Industry Collaboration: Preparatory Grant](#)
- 31-10-2013: [NWO Indo Dutch Science Industry Collaboration: Research Grant](#) – Full Proposal

December:

- 1-12-2013: [NWO Incidental Support](#) for researchers (*information in Dutch*)
- 5-12-2013: [NWO Indo Dutch Science Industry Collaboration: Research Grant](#) – Letter of Intent
- 10-12-2013: ICT Call (a.o. Pervasive and Trusted Network and Service Infrastructures)

January 2014:

- 28-01-2014: [Data Science: Kennis – Innovatie Mapping MKB projects](#) (KIEM)

[FP7/ICT Workprogramme 2013](#)

We will keep our [website](#) updated with the latest news; you may always contact us for information ([Wilma Hiddink](#), a.o., for NEF and GPFs (A2.5 forms for Grant Preparation)).

Projects

TRESPASS

Technology-supported Risk Estimation by Predictive Assessment of Socio-technical Security

Project Number: 318003

Project Manager: Prof. dr. Pieter Hartel

Faculty of [Electrical Engineering, Mathematics and Computer Science](#)

Tel.: +31-53-489 2411

Email: pieter.hartel@utwente.nl

Project website: <http://www.trespas-project.eu/>



Summary

Information security threats to organisations have changed completely over the last decade, due to the complexity and dynamic nature of infrastructures and attacks. Successful attacks cost society billions a year, impacting vital services and the economy. Examples include StuxNet, using infected USB sticks to sabotage nuclear plants, and the DigiNotar attack, using fake digital certificates to spy on website traffic. New attacks cleverly exploit multiple organisational vulnerabilities, involving physical security and human behaviour. Defenders need to make rapid decisions regarding which attacks to block, as both infrastructure and attacker knowledge change rapidly.

Current risk management methods provide descriptive tools for assessing threats by systematic brainstorming. Attack opportunities will be identified and prevented only if people can conceive them. In today's dynamic attack landscape, this process is too slow and exceeds the limits of human imaginative capability. Emerging security risks demand tool support to predict, prioritise, and prevent complex attacks systematically. The TRESPASS project will make this possible, by building an "attack navigator". This navigator makes it possible to say which attack opportunities are possible, which of them are the most urgent, and which countermeasures are most effective. To this end, the project combines knowledge from technical sciences (how vulnerable are protocols and software), social sciences (how likely are people to succumb to social engineering), and state-of-the-art industry processes and tools.

By integrating European expertise on socio-technical security into a widely applicable and standardised framework, TRESPASS will reduce security incidents in Europe, and allow organisations and their customers to make informed decisions about security investments. This increased resilience of European businesses both large and small is vital to safeguarding the social and economic prospects of Europe.

Project duration: 1-11-2012 / 1-11-2016

Project budget: 13.5 M-€ / 10 M-€ funding

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Number of person/months: 1122 person months

Project Coordinator: Universiteit Twente

Participants: Universiteit Twente, Danmarks Tekniske Universitet, Cybernetica AS, GMVIS SKYSOFT SA, GMV Soluciones Globales Internet S.A., Royal Holloway and Bedford New College, ITRUST Consulting SARL, Johann Wolfgang Goethe Universität Frankfurt Am Main, IBM Research GMBH, Technische Universiteit Delft, Technische Universität Hamburg-Harburg, Université du Luxembourg, Aalborg Universitet, Hyperion Systems Ltd., BIZZDESIGN ENTERPRISE ARCHITECTURE SOLUTIONS BV, Deloitte Accountants B.V., LUST BV

Project budget CTIT: 3.3 M-€ / 2.7 M-€ funding

Number of person/years CTIT: 262 person months

Involved groups: [Distributed and Embedded Security \(DIES\)](#) / [Information Systems \(IS\)](#) / [Formal Methods and Tools \(FMT\)](#) / [Department Industrial Engineering and Business Information Systems \(IEBIS\)](#)

CTIT Strategic Research Orientations: [Integrated Security and Privacy in a Networked World](#)

FROG - Friendly Robotic Outdoor Guide

Project Number: 613.001.105

Project Manager: [Vanessa Evers](#)

Faculty of [Electrical Engineering, Mathematics and Computer Science](#)

Summary

FROG proposes to develop a guide robot with a winning personality and behaviours that will engage tourists in a fun exploration of outdoor attractions. The work encompasses innovation in the areas of vision-based detection, robotics design and navigation, human-robot interaction, affective computing, intelligent agent architecture and dependable autonomous outdoor robot operation.

The FROG robots fun personality and social visitor-guide behaviours aim to enhance the user experience. FROGs behaviours will be designed based on the findings of systematic social behavioural studies of human interaction with robots. FROG adapts its behaviour to the users through vision-based detection of human engagement and interest.

Interactive augmented reality overlay capabilities in the body of the robot will enhance the visitors experience and increase knowledge transfer as information is offered through multi-sensory interaction. Gesture detection capabilities further allow the visitors to manipulate the augmented reality interface to explore specific interests.

FROG plans to build a highly dependable robot that operates autonomously in populated outdoor real-world settings. New robust outdoor localization and navigation algorithms based on 6 DOF localization and SLAM will offer precise localization that is required for human-friendly navigation and optimal positioning of the robots augmented reality overlays. Moreover, robust, safety-critical, human-aware navigation algorithms will be developed, taking into account human interaction at all levels. The intelligent agent architecture is a platform that will allow the integration of low-level guidance and communication controls with high-level interaction generation including affective computing algorithms and contextual recognition. This approach will lead to the creation of a new generation of highly sophisticated autonomous outdoor robotic guide services.

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Official project website: <http://www.frogrobot.eu/>

Project duration: October 1st 2011 / September 30, 2014

Involved groups: [Human Media Interaction \(HMI\)](#)

CTIT Strategic Research Orientations: [Natural Interaction in Computer-mediated Environments](#)

CTIT Newsletters

In case you have input for the newsletter, about workshops, PhD defences or other events, please send the information to Secretariaat-CTIT@utwente.nl.