

ECSEL2017-1-737451

FitOptiVis

**From the cloud to the edge - smart Integration and
OPTimisation Technologies for highly efficient Image and Video
processing Systems**

Deliverable: D8.3 Preliminary Dissemination and Communication Plan and Report

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Responsible WP8

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| PP | Restricted to other programme participants (including the Commission Service | |
| RE | Restricted to a group specified by the consortium (including the Commission Services) | |
| CO | Confidential, only for members of the consortium (excluding the Commission Services) | |

0 DOCUMENT INFO

Author

| Author | Company | E-mail |
|---------------|---------|-------------------|
| Olli I. Heimo | UTU | olli.heimo@utu.fi |
| Tero Sääntti | UTU | teansa@utu.fi |
| | | |

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| Date | Issue | E-mailer |
|------------|-------|--------------------------------------|
| 31-05-2019 | Final | fitoptivis-all@lists.utu.fi |
| | | Patrick.vandenberghe@ecsel.europe.eu |
| | | |



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1 INTRODUCTION

Dissemination is an important element of the FitOptiVis project. It will be carefully planned and implemented in order to spread awareness about this ECSEL funded project to a wide audience, including its end-users. This will help guarantee an optimal exploitation of the project results and the long-term sustainability of the FitOptiVis pilots, demonstrators, and technology platforms. For this reason, the FitOptiVis participants have formulated an initial dissemination plan that describes the objectives and foreseen channels for the dissemination of the knowledge generated by the project. This plan is in compliance with the FitOptiVis Annex 1 (ECSEL-2017-1-737451), the FitOptiVis Consortium Agreement, and the Communication Guidelines for Projects/Studies published in 2018. This plan will be revised as the need arises and in Month 36 of the project a final report on the dissemination activities will be published (D8.8 Final Dissemination & Communication Plan and Report).

Table 1 - List of FitOptiVis beneficiaries/participants:

| Part. No. | Participant organisation name | Participant short name | Country |
|-----------|---|------------------------|---------|
| 1 | (Coordinator) Philips Healthcare | PHL | NL |
| 2 | Futura | FUT | NL |
| 3 | TU Delft | TUD | NL |
| 4 | TU Eindhoven | TUE | NL |
| 5 | CAMEA | CAMEA | CZ |
| 6 | Charles University | CUNI | CZ |
| 7 | Rex | REX | CZ |
| 8 | Brno University of Technology | BUT | CZ |
| 9 | University West Bohemia | UWB | CZ |
| 10 | Ustav teorie informace a automatizace AV CR, v.v.i. | UTIA | CZ |
| 11 | Hurja Solutions Oy | HURJA | FI |
| 12 | Nokia Technologies Oy | NOKIA | FI |
| 13 | Tampere University of Technology | TUT | FI |
| 14 | University of Turku | UTU | FI |
| 15 | Visidon Oy | VISI | FI |
| 16 | Hi Iberia | HIB | ES |
| 17 | Instituto Tecnológico de Informática | ITI | ES |
| 18 | RGB | RGB | ES |
| 19 | Seven Solutions | 7SOLS | ES |
| 20 | Schneider Electric España S.A. | SCHN | ES |
| 21 | Thales Alenia Space | TASE | ES |
| 22 | University Cantabria | UC | ES |
| 23 | University Granada | UGR | ES |
| 24 | Abinsula | ABI | IT |
| 25 | Aitek | AITEK | IT |
| 26 | Società Acquadotti Tirreni | SAT | IT |
| 28 | Isarail | ISR | IT |
| 29 | Università degli Studi di Cagliari | UNICA | IT |
| 30 | Università degli Studi di Sassari | UNISS | IT |
| 31 | Università degli Studi dell'Aquila | UNIVAQ | IT |

2 FITOPTIVIS DISSEMINATION STRATEGY

2.1 Means of communication

In order for dissemination to be effective, multiple communication channels are used in order to be able to effectively reach the desired target audiences. In this section an impression of the dissemination strategy over the M1-M12 period will be given while in the remainder of this deliverable a more detailed account will be presented.

One focus of dissemination will be on scientific publications and to address the academic research community. Publications within the area of interest of the project include both technology oriented journals, to disseminate the FitOptiVis achievements on transversal methods, tools and components, as well as more application oriented ones, to vertically cover the different project assessment domains, and even journals covering innovation management. Results to be published will naturally tend to fall into one of the first two categories, with some overlap between the two.

In addition to journal publications, results may be presented at conferences, with a similar division between technology, application and innovation management oriented venues, as in the case of journal publications.

Several conferences are accompanied by exhibitor presentations/booths and tutorials, where FitOptiVis partners can present and inform visitors about project product innovations and/or can push for FitOptiVis technologies usage by means of guided lectures on benefits and demo examples. The results of FitOptiVis are presented here to complement the scientific communication.

The communication and dissemination approach of FitOptiVis is implemented at different levels. It is based on solid project-level sharing of knowledge and communication patterns and it extends gradually to different target-users groups, from the FitOptiVis network to the general public. This approach is illustrated in Figure 1.

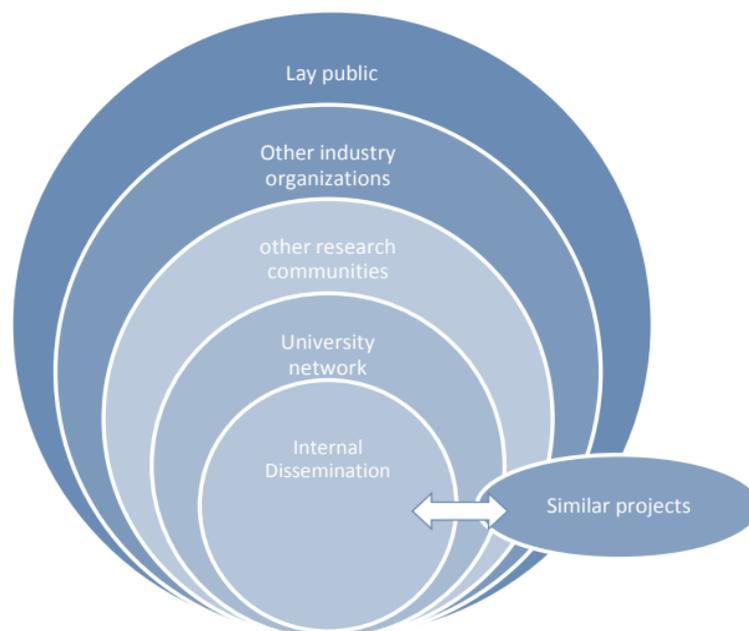


Figure 1, FitOptiVis Dissemination Strategy

2.2 Target Groups

Several important target audiences for dissemination activities have been identified; these include academic and industrial researchers, interested parties in the following fields: Image and Video Processing Community, Design and Technologies, Computer Aided Design, Cyber Physical and Embedded Systems, Verification and Formal Methods. Moreover, also stakeholders and general public are important FitOptiVis targets.

Different dissemination products are expected to appeal differently to each of these categories, and therefore it is necessary to be aware of what the focus of dissemination is expected to be during the different stages of the project, and how the results to be disseminated are to be best tailored to their target audience.

As the project progresses, it is expected that the focus of the dissemination will - next to the pilots and demonstrators – increasingly also include the pilot products that demonstrate the technologies in practice.

2.3 Timing

The expected shift in focus of dissemination activities described in the previous section leads to a different focus of the various dissemination products during the different stages of the project.

Concerning the timing of our dissemination strategy, three distinct phases of implementation can be identified, going from project overview to the dissemination of the final outcomes. These phases are listed in Figure 2.

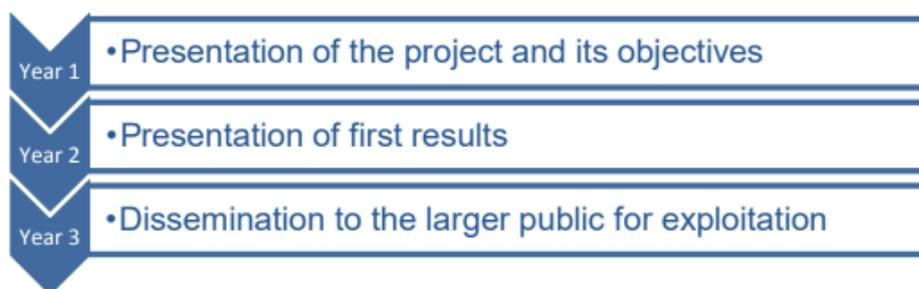


Figure 2, Timing of FitOptiVis dissemination

2.4 Internal Dissemination Strategy

Continuous and effective internal communication is key to the success of large international projects such as FitOptiVis. For this reason, internal dissemination must be considered as an essential part of the dissemination strategy as a whole. Internal communication should allow to:

- Keep track of project-related decisions and action points;
- Clearly communicate the role and responsibility of each project participant;
- Communicate on WP and demonstrator progress;
- Disseminate the right level of information to project participants;
- Identify problems and provide solutions.



2.5 External Dissemination Strategy

Much of the effort is aimed at 'external communication' to promote the project, and disseminate results. The major external dissemination objectives are to:

- Identify the different external user's groups that could benefit from the FitOptiVis pilots and demonstrators and project's results and the best channels of communication to reach them;
- Effectively use these communication channels to present the FitOptiVis project's results;
- Establish links and encourage synergies with similar projects and initiatives;
- Provide the foundation of a comprehensive exploitation strategy.

Details of each dissemination activity/tool are provided in Section 4 ("Dissemination Tools and activities")

3 GENERAL DISSEMINATION RULES

3.1 Presentation and publication guidelines

Any publication related to work done under FitOptiVis shall be sent to the Coordinator, Philips, and then by the Coordinator to the FitOptiVis Consortium participants at the earliest time possible, but at least 45 days before publication, together with sufficient information on the results it will disseminate. The latter will have 30 days to comment/object to the publication. Both of these can be waived by mutual agreement. For more details about publications, please refer to the FitOptiVis Grant Agreement (Article 29).

Open access, which can be either green or gold, publishing is to be preferred, actually the Grant Agreement states:” Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results.” This needs to be considered while planning publications.

Any project presentation will be made using the project templates provided by Philips, and will have to be circulated for comments to the consortium participants at the earliest time possible and prior to the meeting.

Presentations and publications must also comply with the following clauses about graphic identity and compulsory acknowledgements.

3.2 Graphic Identity

This section describes the features that contribute to giving a common graphic identity to all dissemination activities allowing for a better visibility and recognition of the project.

3.2.1 Layouts and Templates

Common/similar layouts are used for FitOptiVis dissemination materials. The project colour theme is blue. Templates for project meeting minutes and PowerPoint presentations were made available by the project coordinator, Philips. The files can be found in the project repository.

3.2.2 Logos

The project logo, depicted in Figure 3, has been created. The project logo represents the connection between vision (eye) and technology (cogwheel). In addition to the project logo, the ECSEL-JU requires that the logo of ECSEL is used on any project publication and promotional material, as well as on the project’s website (see also “3.3 Compulsory Acknowledgements” section).

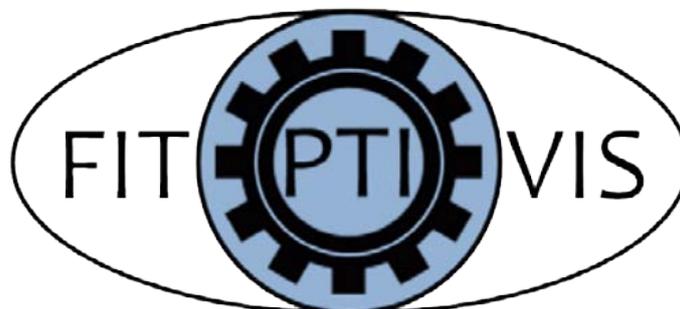


Figure 3 - FitOptiVis logo.

3.3 Compulsory Acknowledgements

Any partner in the FitOptiVis project will in their dissemination activities clearly acknowledge the ECSEL with reference to the project “FitOptiVis” and the grant number ECSEL 2017-1-737451.

Preferred Reference

"This project/study is partially funded by the European Commission under the EU Joint Undertaking program "ECSEL" +include link to ECSEL website (<http://www.ecsel-ju.eu/web/index.php>) Project "FitOptiVis" grant no: 2017-1-737451+ include link to the project website (<https://www.ecsel.eu/projects/fitoptivis>)

4 DISSEMINATION TOOLS

4.1 Internal Dissemination Tools

The project coordinator, Philips, and the participant in charge of the communication and dissemination work package (WP8, UTU), have put in place a variety of mechanisms to optimize the communication workflow.

4.1.1 Project Meetings

As detailed in the FitOptiVis Description of Work, there are several types of project meetings:

- Management Board meetings taking place monthly (mostly remote teleconference calls);
- Project face-to-face workshops 3-4 per year;
- Work Package meetings and email lists as needed.

At the moment of submitting this document so far 9 Management Board and 4 face-to-face Workshops have been organized. The Management Board meetings and Workshops serve to update each other on project results, and to align the activities for the next period. Apart from that the workshops are a great opportunity to build Pan-European networks, and advertise the demonstrators.

4.1.2 Information sharing

FitOptiVis consortium members have access to a project private database that is shielded by a user code and password, to share project information, presentations and even photos. The user-friendly file transfer environment is structured around the different work packages (WPs), and can be easily developed and modified by any identified/authorized FitOptiVis project participant. The files are stored in a version controlled fashion (SVN), and the descriptions of the files are stored in the database. As all partners have access to both tools, they can update all required information in a distributed manner. The database also has section for partner descriptions and also personnel. This allows a personnel listing with contact information, kept away from the general public, so that the partners can reach each other.

4.1.3 Other Tools

Other internal communication tools include mailing lists (participant, WP and at the consortium levels), internal staff meeting and meeting minutes, web conferencing etc.

4.2 External Dissemination Tools

External dissemination designates actions aiming at ensuring the visibility and awareness of the results outside the Consortium borders, i.e., in the scientific community, in academic institutions, in other research organizations, or among the lay public.

UGR presented FitOptiVis objectives and activities during the Workshop on Industrial Robotics and Computer Vision between the Univ. of Granada and the Korean Association of Robot Industry (KAR). This workshop was held at the Research Centre for Information and Communications Technologies (CITIC-UGR), in Granada (Spain) last March 1, 2019. UGR presented its low-latency solutions for computer vision

processing and their application to robotics. During the workshop, collaboration activities between the Univ. of Granada and the Korean Association of Robot Industry were also discussed with KAR Team Leader Mr. Gyeong-jun Lee and KAR Strategy and Planning Team Leader Ms. Han-Byeol kim.

4.2.1 Project Public Website

The FitOptiVis public website presents general project information, participant information, downloadable publications and deliverables. Furthermore, it informs viewers about previous and forthcoming events and activities of the project as well as of other relevant projects and collaborations. Additional features can be added as needed.

BUT initially designed the website of FitOptiVis and will host it for the required period. The website will be updated on a continual basis by BUT who as the D8.1 Lead beneficiary is responsible for the website content until end of the project. Other FitOptiVis participants' contributions will be requested throughout the project.

Link to the FitOptiVis public website: <https://www.ecsel.eu/projects/fitoptivis>

4.2.2 Publications and Presentations

FitOptiVis project results will be submitted for publication in scientific journals, conferences, and workshops. The submission of papers jointly written by project participants is encouraged.

Given the diversity of the topics and demonstrators being addressed in FitOptiVis, a wide variety of national and international journals, conferences and workshops can be targeted to disseminate FitOptiVis results. The selection of a certain dissemination platforms will, apart from the topic, also depend on the timing. Not all conferences are held every year, and also the timing within the year may vary. A preliminary list of targeted journals and conferences was also included in Table 20 of the original proposal.

Journals targeted by FitOptiVis include:

- ACM Transactions on Cyberphysical Systems (TCPS)
- ACM Transactions on Design Automation of Electronic Systems (TODAES)
- ACM Transactions on Embedded Computing Systems (TECS)
- ACM Transactions on Reconfigurable Technology and Systems (ACM)
- Discrete Event Dynamic Systems: Theory and Applications (DEDS)
- IEEE/ACM Transactions and Letters (Computer, Industrial Informatics, Embedded Systems, CAD, etc.)
- ACM Transactions on Reconfigurable Technology and Systems (TRETTS)
- IEEE Transactions on Circuits and Systems for Video Technology
- IEEE Transactions on Control Systems Technology (TCST)
- IEEE Transactions on Industrial Electronics (TIE)
- IEEE Transactions on Industrial Informatics
- IEEE Transactions on Parallel and Distributed Systems
- IEEE Transactions on Services Computing
- IEEE Journal of Selected Topics in Signal Processing
- IEEE Transactions on Signal and Information Processing over Networks
- IET Image Processing
- IET Signal Processing
- International Journal of Parallel Programming (Springer)

- Journal of Parallel and Distributed Computing (Elsevier)
- Journal of Real-Time Image Processing
- Journal of Signal Processing Systems (Springer)
- Transactions on Image Processing

Conferences targeted by FitOptiVis include:

- AAL-IoT: EAI International Conference on Ambient Assisted Living Technologies based on Internet of Things.
- ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGA)
- Computational Color Imaging Workshop (CCIW)
- Cyber-Physical Systems week (CPS week)
- Design Automation Conference (DAC)
- Design and Automation and Test in Europe (DATE)
- Embedded Systems Week (ESWEEK)
- Euromicro Conference on Digital System Design (DSD)
- European Conference on Computer Vision Edinburgh, England, United Kingdom Aug 23 - Aug 28, 2020 (ECCV 2020).
- EUVIP 2019
- Field-Programmable Logic and Applications Conference
- Future Security Secure Research Conference.
- High Performance Computing (HPC)
- ICCASA: EAI International Conference on Context-Aware Systems and Applications.
- ICSP 2019: Industry Case Studies Program 2019 – Industry Day (ICSP 2019)
- ICT4AWE ICT for Ageing Well.
- IEEE Conference on Decision and Control (CDC)
- IEEE Conference on Emerging Technologies and Factory Automation (EFTA)
- IEEE International Conference on Image Processing
- IEEE Global Communications Conference
- IEEE International Symposium on Personal, Indoor and Mobile Radio Communications
- IEEE International Conference on Communications
- IFAC Conference on Programmable Devices and Embedded Systems (PDeS)
- IFAC Workshop on Discrete Event Systems (WODES)
- International Conference on Computer Vision 2020 (ICCVG 2020)
- International Conference on Field-Programmable Logic and Applications (FPL)
- International Conference on Hardware/Software Codesign and System Synthesis (CODES+ISSS)
- International Conference on Control, Decision and Information Technologies (CODIT)
- International Conference on Distributed Smart Cameras (ICDSC)
- International Conference on Signal and Image Processing (ICSIP)
- International Symposium on Low Power Electronics and Design (ISLPED)
- Mediterranean Conference on Control and Automation (MED)

4.2.3 Press Releases

Press releases will be organized on an ad hoc base to disseminate special milestones and/or project results. Very often media coverage cannot be orchestrated, but rather “happens” as a result related dissemination activities.

4.2.4 Alignment with other European Projects

The use of virtual reality or augmented reality tools for safety applications is currently investigated in several EU-funded projects. In more details, *Immersafe* - Immersive Visual Technologies for Safety-Critical Applications is a four-year (2018-2021) H2020 Marie Skłodowska-Curie Innovative Training Network that brings together 9 beneficiaries and 5 partner organizations from Finland, Sweden, Norway, Croatia, Italy, and Switzerland. The aim of the project is the training of a new generation of multi-disciplinary experts, who understand the core imaging technologies, the requirements set to them by the safety-critical applications and who can account for the human user in the design of such systems. In fact, in many contexts – heavy work machines, emergency response, control centres – human operators face complex and demanding situations where their decisions can have far-reaching consequences on productivity, environment, and even human lives. To provide to the operator situational awareness, which can be achieved by sensing relevant visual data about the operating environment, Immersive Visual Technologies can be used for providing ultra-realistic and interactive visual experience.

Elements of the monitoring solution using video analytics in use case UC3 Habit Tracking are being co-designed with similar results in ECSEL project *AFarCloud* in their use case for animal grazing monitoring¹. Despite the different target (in *AFarCloud* we're targeting the monitoring of animals in farms where in *FitOptiVis* it is humans at their homes) the rough set-up is similar: fixed cameras capture and stream video that is analysed upstream at edge or cloud nodes to extract behaviour of the subjects and understand their actions (e.g., patterns, outliers, etc.). Thus, some elements can be shared among the projects. Specifically we're at the time of writing of this report sharing the capture hardware (FOSCAM FI9900EP infrared cameras²) for limited experiments in the baseline deployment for UC3 Habit Tracking.

Since the timeline of *AFarCloud* and *FitOptiVis* is very aligned (both correspond to the same ECSEL call) and there are a number of shared partners (e.g., HIB for UC3, but also UNIVAQ) it is expected that joint work may be done together in terms of dissemination and that *FitOptiVis* technology approaches can be tested there.

EMC² – ‘Embedded Multi-Core systems for Mixed Criticality applications in dynamic and changeable real-time environments’ is an ARTEMIS Joint Undertaking project in the Innovation Pilot Programme ‘Computing platforms for embedded systems’ (AIPP5). Embedded systems are the key innovation driver to improve almost all mechatronic products with cheaper and even new functionalities. They support today's information society as inter-system communication enabler. A major industrial challenge arises from the need to face cost efficient integration of different applications with different levels of safety and security on a single computing platform in an open context. ITI participated in this recently finished project by developing enhanced 3D Industrial inspection system

¹ <http://www.afarcloud.eu/spain-local/> - *AFarCloud* Grazing Monitoring local demonstrator

² <https://www.foscam.com/FI9900EP.html> - FOSCAM FI9900EP IR camera website.

features and applying them in an innovative pilot. All these developments have influenced the work carried out in FitOptiVis.

H2020 *ZDMP* (Zero Defect Manufacturing Platform) is a European project which main aim is to establish a digital platform for connected smart factories for achieving excellence in manufacturing through zero-defect processes and products. The project started in January 2019 and it will last a total of four years. ITI forms part of the consortium as technical manager and plans to integrate its 3D Industrial Inspection system in the project portfolio solutions, it will count on the enhancements achieved within FitOptiVis project.

CERBERO (<https://www.cerbero-h2020.eu/>): CERBERO provides a model-based methodology and toolset for design, incremental prototyping, verification and continuous developments of adaptive CPS. Run-time CPS management is enabled leveraging on strategies for system-in-the loop co-simulation, continuous monitoring, optimization and system reconfiguration to provide high (optimal) performance, while being reactive to users' needs and changed environmental conditions. UNISS, UNICA, and ABI are involved in CERBERO.

4.2.5 Education and Innovation

Educating young scientists and involving them in innovation is an important aspect of the FitOptiVis project. Young scientists are invited to apply for positions at various levels and to learn about the concept while at the same time, in so far it is possible, the demonstrator products will be presented. Also in university courses the concepts of the project are discussed while the platform technologies are explained.

For example, University of Granada has already included FitOptiVis methodology and objectives as part of their Master's degree curriculum. Master students have already studied the consortium work during the classes for our course on Advanced Architectures for Vision Processing (3 ECTS), within our Master in Big Data and Computer Engineering (<https://masteres.ugr.es/datcom/>). Additionally, it is right now the topic for two master's final project on video-surveillance applications and for the monitoring of the elderly at home.

5 EXECUTIVE SUMMARY

This Initial Dissemination Plan outlines the general principles applicable to the project communication as well as the different methods that have or will be put in place to:

- Facilitate the sharing of knowledge within the project consortium for optimal project management and to
- Promote the project's research and outcomes to the identified target groups to guarantee the long term success and sustainability of the project.

The sharing of knowledge within the consortium is mainly done through the Management Board meetings and Workshops. During these meetings partners tell about their results and align the activities for the next period. So far 9 Management Board meetings and 4 Workshops have been held. The Workshops were hosted by different partners in different countries (Netherlands, Italy, Finland, Czech Republic). Next the rotation will go to the Netherlands, in September. Spain will get its turn in December.

Finally, an efficient file sharing system is in place to exchange documents, files, presentations etc. The system has version control for safety and ease of operation. The system is hosted by BUT. The details of publications and other presentations generated by the project will be collected in the database, which is hosted by UTU. The same system is used to collect partner descriptions and personnel information.

The communication to the target groups outside the consortium is, and will be mainly done through: conferences, scientific journals, symposia, press releases and educational activities. At the project level so far one publication (see Annex 6.2, paper 6) gives wider audience an overview of the project. Also, contributions to summer schools are planned for the coming summer.

6 ANNEXES

6.1 Annex I: Project poster

FITOPTIVIS



From the cloud to the edge - smart IntegraTion and OPtimisation Technologies for highly efficient Image and Video processing Systems



Objectives

FitOptivis addresses CPS with distributed actuators and image and video sensors. Real-time image- and video-processing pipelines are a prime source for environmental information and feedback. FitOptivis applies advanced imaging and video applications, combining multiple heterogeneous sensor inputs. It balances power demand versus image and video performance.

Use cases

- Water supply
- Virtual reality
- Habit tracking
- 3D Industrial inspection
- Road traffic surveillance
- Multi source medical imaging composition
- Sustainable safe MRI
- Robot calibration
- Smart grid infrastructure surveillance
- Autonomous exploration

Results

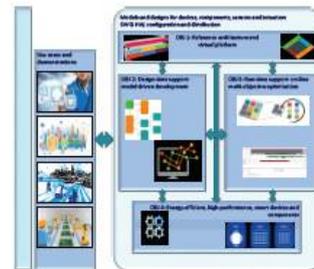
Reference architecture
Design portability
On-line multi-objective quality and resource management
Energy-efficient, high-performance, smart devices and components

Essential Technologies

- Smart System Integration
- Cyber Physical Systems
- Design Technology

Key application domains

- Smart health
- Smart Society
- Smart Production
- Smart Mobility



| | |
|---|---|
| <p>Spain IRIBERA INSTITUTO TECNOLÓGICO DE INFORMÁTICA RIG REVEN SOLUTIONS SCHNEIDER ELECTRIC ESPAÑA S.A. THALES ALENIA SPACE UNIVERSITY CANTABRIA UNIVERSITY GRANADA</p> <p>Netherlands PHILIPS HEALTHCARE FUTURA TU Delft TU Eindhoven</p> <p>Czech Republic CAMEA CHARLES UNIVERSITY REX</p> | <p>BRNO UNIVERSITY OF TECHNOLOGY UNIVERSITY WEST BOHEMIA ÚSTAV TEORIE INFORMAČNICE A AUTOMATIZACE AV ČR, VVIL</p> <p>Italy ARMISULA ATEK SOCIETÀ ACQUEDOTTI TIRRENI BITTRICE SRL ISARAIL UNIVERSITÀ DEGLI STUDI DI CAGLIARI UNIVERSITÀ DEGLI STUDI DI SASSARI UNIVERSITÀ DEGLI STUDI DELL'AGRIOLA</p> <p>Finland HURJA SOLUTIONS OY/THALES ITALIA - AIR OPERATIONS NOKIA TECHNOLOGIES OY TAMPERE UNIVERSITY OF TECHNOLOGY UNIVERSITY TURKU VISION OY</p> |
|---|---|



| | |
|--|-----------------------|
| | |
| Project Coordinator Frank van der Linden | |
| Institution Philips Electronics Netherlands BV | |
| Email frank.van.der.linden@philips.com | |
| Start 1-6-2015 | Duration 36 |
| Total investment €M 2.5 | |
| Participating organisations 30 | |
| Number of countries 5 | |

6.2 Annex II: Papers/Conferences/Workshops/etc.

1. **Guaranteed Latency Applications in Edge-Cloud Environment**, Petr Hnetyнка, Petr Kubat, Rima Al Ali, Ilias Gerostathopoulos, Danylo Khalyeyev, In 12th European Conference on Software Architecture: Companion Proceedings (ECSA '18), (Publication in Conference proceedings/Workshop).
2. **Supporting Columnar In-memory Formats on FPGA: The Hardware Design of Fletcher for Apache Arrow**, Johan Peltenburg, Jeroen van Straten, Matthijs Brobbel, H. Peter Hofstee, Zaid Al-Ars, In Applied Reconfigurable Computing (ARC 2019) (Publication in Conference proceedings/Workshop).
3. **An integrated hardware/software design methodology for signal processing systems**, Lin Li, Carlo Sau, Tiziana Fanni, Jingui Li, Timo Viitanen, François Christophe, Francesca Palumbo, Luigi Raffo, Heikki Huttunen, Jarmo Takala, Shuvra S.Bhattacharyya, In Journal of Systems Architecture (Article in Journal).
4. **Self-adaptive loop for Cyber-Physical System: is the DPR profitable?**, Gabriella D'Andrea, Tania Di Mascio and Giacomo Valente, Accepted for publication.
5. **Demo paper - AN AUTONOMIC MANAGER FOR EDGE-COMPUTING PLATFORMS**, Gabriella D'Andrea, Tania Di Mascio, Luigi Pomante and Giacomo Valente, Conference on Design and Test Automation in Europe (DATE) – University Booth, 2019.
6. **The FitOptiVis ECSEL Project: Highly Efficient Distributed Embedded Image/Video Processing in Cyber-Physical Systems**, Zaid Al-Ars, Twan Basten, Ad de Beer, Marc Geilen, Dip Goswami, Pekka Jääskeläinen, Jiří Kadlec, Marcos Martinez de Alejandro, Francesca Palumbo, Geran Peeren, Luigi Pomante, Frank van der Linden, Juka Saarinen, Tero Sääntti, Carlo Sau, Maria Katuscia Zedda. 2019. In *Proceedings of ACM Computing Frontiers conference (CF'19). Alghero, Sardinia, ITALY, 6 pages.* <https://doi.org/10.1145/3310273.3323437>.
7. **Reconfigurable and approximate computing for video coding**, Francesca Palumbo and Carlo Sau, in the IET Book entitled “VLSI Architectures for Future Video Coding” to be published in July 2019.
8. **Dataflow-Based Toolchain for Adaptive Hardware Accelerators**, Francesca Palumbo, Carlo Sau, Tiziana Fanni and Claudio Rubattu, at the CPS&IoT'2019 Summer School on Cyber-Physical Systems and Internet-of-Things, Budva, Montenegro, June 10-14, 2019 (Planned workshop).
9. **Design Time and Run Time Resources for the ZynqBerry Board TE0726-03M with SDSoC 2018.2 Support**, Jiří Kadlec, Zdeněk Pohl, Lukáš Kohout, 2019, (Other).
10. **Design Time and Run Time Resources for Zynq Ultrascale+ TE0808-04-15EG-1EE with SDSoC 2018.2 Support**, Jiří Kadlec, Zdeněk Pohl, Lukáš Kohout, 2019, (Other).
11. **Design Time and Run Time Resources for Zynq Ultrascale+ TE0820-03-4EV-1E with SDSoC 2018.2 Support**, Jiří Kadlec, Zdeněk Pohl, Lukáš Kohout, 2019, (Other).
12. **Video Input/Output IP Cores for TE0820 SoM with TE0701 Carrier and Avnet HDMI Input/Output FMC Module**, Lukas Kohout, Jiri Kadlec, Zdenek Pohl, 2019, (Other).



13. **Video Input/Output IP Cores for Xilinx ZCU102 with Avnet HDMI Input/Output FMC Module**, Lukas Kohout, Jiri Kadlec, Zdenek Pohl, 2019, (Other).
14. **Stereo Demo**, Zdenek Pohl, Lukas Kohout, Jiri Kadlec, 2019, (Other).
15. **Live Canny Edge Detection Demo for TE0808+TEBF0808 Trenz Board**, Zdenek Pohl, Lukas Kohout, Jiri Kadlec, 2019, (Other).

6.3 Annex III: Press Releases and Public Announcements

None so far.