



ASCI State of the Union

by the Director of ASCI prof. Henri Bal (Vrije Universiteit)



While ASCI is approaching its 25th birthday in 2018, I see many changes taking place in the school. One change that is immediately apparent as you are currently looking at it, is the publication of the ASCI annual *'State of the Union'*. My concise briefing replaces the more formal and longer research plans and reports of the past two decades.

The introduction of Graduate Schools in the Netherlands will lead to more formal requirements for PhD students from the degree-granting universities. The requirements complement and partially overlap with the requirements for obtaining the ASCI certificate. It will also increase the demand for the PhD level courses that ASCI and other schools provide. I therefore believe that the role of research schools like ASCI will change, and shift to focus more on high-quality PhD courses and less on setting the rules for individual PhD programs. I like to highlight several noteworthy new initiatives in this direction.

- Structural support for the *Netherlands Conference on Computer Vision (NCCV)*, an important meeting place for Imaging researchers.
- Initiation of a new *International Conference on Computing Systems (CompSys-2017)*, scheduled for 19-21 June 2017 (chaired by Alexandru Iosup), for the Computing researchers in ASCI and other schools.
- *Development of new courses* (such as A26: Dataflow Analysis for Real-Time Multiprocessor Systems) in a format that is more suitable for community building, including an attractive off-campus location.
- Publication of *PhD theses in digital format* instead of paper format.

ASCI obtained new funding from TU Delft for these initiatives, as part of the so-called SODOLA¹ regulations. In addition, we will continue our established tasks, including high-quality PhD education, active participation in the successful annual ICT.Open conference and the ICT with Industry workshop, and coordination of the experimental infrastructure (DAS) for our research.

Looking forward, I welcome new initiatives for PhD education and invite especially the younger generation of Computing and Imaging scientists in the Netherlands to participate by sharing new ideas with me.

Looking back at 2016, I mention a selection of the many highlights:

- *Completion of the assessment by an international committee of experts* of the three Computer Science research schools (ASCI, SIKS, IPA). The overall conclusion is that ‘the committee is impressed by the excellent quality of the services that are provided by the schools’. This assessment replaces the earlier 5-year ECOS re-accreditation procedure.
- *Netherlands Award for ICT Research 2016 and Membership of the Young Academy of Sciences (Young KNAW) of Alexandru Iosup.*
- *A strong participation in large national initiatives* like COMMIT/, COMMIT2DATA, and STW Perspective.
- *Publication of a paper in IEEE Computer (May 2016) about the history and impact of DAS.*
The current system, DAS-5, was installed in June 2015 and is used by dozens of projects.

As director of ASCI also like to thank Prof. Koen Langendoen for his work as Chair of the ASCI Education Committee and for his important contributions to the successful assessment.

I welcome dr. Clemens Grellck as the new chair. I also welcome a new research group, headed by Prof.dr. Raymond Veldhuis from the University of Twente.

A Note from education committee by its chair dr. Clemens Grellck (University of Amsterdam)

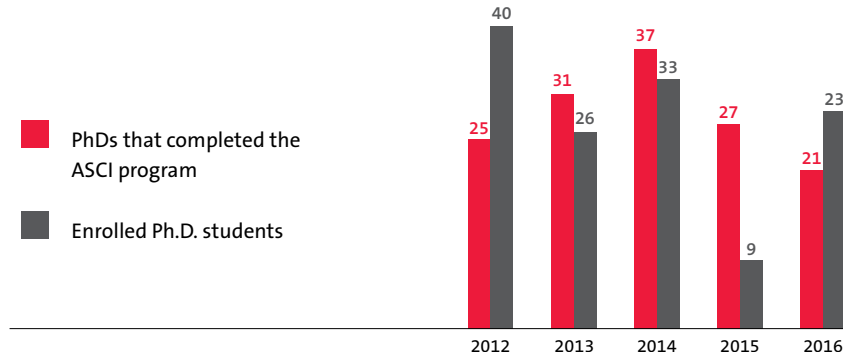
The ASCI School continues to deliver a stable course programme that is both well attended and well received by the ASCI PhD students as well as guests from the other research schools and the general public. Most courses are organised bi-annually; in 2016 these were:

- A1: Advanced Pattern Recognition (22 ASCI members and 7 guests)
- A8 Front- end Vision and Multiscale Image Analysis (3 ASCI members and 3 guests)
- A17 Visualization and Virtual Reality (17 ASCI members)
- A23 Algorithms for Biological Networks (3 ASCI members and 17 guests)
- A24 Architecture and Programming of Many-Core Processors (14 ASCI members and 2 guests)

With the opportunities provided by the additional SODOLA funds I intend to develop some of the ASCI courses into schools to be held outside of universities at attractive locations preferably in the Dutch countryside. The aim of this move is to foster communication and interaction between lecturers and participants who would be expected to spend the whole event together. Likewise I aim at stimulating group dynamics and collaboration among generations of ASCI PhD students. Discussion of this new organisational model has begun with organisers of several courses, but so far time has been too short to actually implement the new model.

A Note from the research committee by its chair prof. Jack van Wijk (Eindhoven University of Technology)

The number of PhDs that completed the ASCI program per year was 25, 31, 37, 27, and 21 over the period 2012-2016; the number of enrolled Ph.D. students per year was 40, 26, 33, 9, and 23 over the same period. Both numbers seem stable, the low number of new students in 2015 is due to a temporary issue with secretarial support. Given the increased focus on viewing ASCI as course provider, the role of ASCI to focus and promote research has diminished, and hence I think the role of the research committee should also be reconsidered.



ASCI participated in the yearly ICT.Open conference by organizing special tracks and encouraging the students to submit papers, presentations, and posters. ASCI staff and students participated in the ICT with Industry workshops, organized by NWO/STW together with ASCI, SIKS and IPA. Here, teams of young researchers, supported by case owners and academic staff, are challenged to come with out-of-the-box solutions to industrial problems.

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