

## Obituary for Prof. Dr.-Ing. Uwe Stilla

Prof. Dr.-Ing. Uwe Stilla, Professor of Photogrammetry and Remote Sensing at the Technical University of Munich until March 2023, passed away in Munich on 10 May 2023 after a long and serious illness, at the age of 66. With him, a friend, mentor and colleague has left us far too early.

Uwe Stilla was born in Cologne in 1957, and completed a programme in communications engineering at the University of Paderborn in 1980. He went on to study biomedical engineering at the University of Karlsruhe, graduating in 1987. He then worked as a research assistant at the Institute for Biocybernetics and Biomedical Engineering at that university. In 1990, Uwe Stilla joined the Research Institute for Information Processing and Pattern Recognition (FIM, today part of the Fraunhofer Institute of Optronics, System Technologies and Image Exploitation). In 1993, he completed a PhD in automatic image processing and pattern recognition at the University of Karlsruhe. In April 2004, he accepted a professorship for photogrammetry and remote sensing at the Technical University of Munich.



*Prof. Uwe Stilla at the DGPF booth during Intergeo 2017 in Berlin*

During his time at FIM, he already worked on a project dealing with the detection of sealed areas in cities. Due to his broad background, he quickly realized the huge potential of new sensors and platforms. He was among the first to investigate the possibilities of laser scanning, imaging radar and thermal cameras for photogrammetry and remote sensing. Later, he held a special position in FIM: free from project constraints, he was able to push innovative projects which also had a strong impact on academia.

At TU Munich, he further developed his field with a multitude of original, and at the same time, scientifically sound ideas. In addition to the traditional survey aircrafts and satellites, he soon started to put sensors on light aircraft and vehicles, which was still unusual at the time. The detection and monitoring of cities was another of his focal research points. In 2014, Uwe Stilla was a founding member of the Leonhard Obermeyer Center (LOC), the TUM research centre on digital methods for the built environment. Together with his colleagues, he installed cameras on construction cranes in order to automatically compare the construction progress with digital building models. In recent years, he increasingly worked in the fields of automatic image analysis, computer vision and artificial intelligence. Here too, based on his dissertation, he was one of the pioneers who opened up these fields for photogrammetry and remote sensing. As a result, the Chair of Photogrammetry and Remote Sensing at TUM is now one of the world's best addresses in this field.

Uwe Stilla was Vice Dean of the then Faculty of Civil Engineering and Surveying from 2008 to 2013, and Study Dean of the five geodetic degree programmes from 2005 to 2016. He had a clear eye for the potential of young talents, whom he supported to the best of his ability as an academic teacher and mentor. For him, teaching was never a chore. He wanted to inspire the students, as well as his staff, for photogrammetry and remote sensing. Lectures were always very well structured and provided with many illustrative examples and experiments.

In his work as a boss, Uwe Stilla was always *primus inter pares*. He never struck a commanding tone, never criticised anyone excessively when something didn't work out (which sometimes did happen,

despite all the planning), he would simply say, "We'll do better next time." The large number of successful dissertations and habilitations he supervised, as well as the fact that many of his former staff members later went on to very successful careers, whether in the private sector or in higher education, speaks for itself. He remained a fatherly friend to many of them throughout his life.

Uwe Stilla was also wholeheartedly committed to science management. In the German Society for Photogrammetry, Remote Sensing and Geoinformation (DGPF), he served as Vice-President from 2012 to 2016, followed by four very successful years as President. During this time, important decisions were taken, such as the change of publisher for the journal PFG to Springer, and a fundamental restructuring of the working groups. His special focus was again on the promotion of young scientists; the scheme to invite 10 selected candidates for the Karl Kraus Young Scientist Award to the annual conference, with all expenses paid, was introduced under his aegis. Furthermore, the DGPF established the Student Forum, which in the meantime has become the Young Researchers Network. Last but not least, he co-hosted the large annual joint conference PFGK18 of DGPF, Round Table GIS and German Society for Cartography in 2018 at TU Munich, which many of us remember fondly. Stilla was also a member of the German Geodetic Commission (DGK) and the Commission for International Geodesy and Glaciology in the Bavarian Academy of Sciences.

On an international level, his involvement in the International Society for Photogrammetry and Remote Sensing (ISPRS) deserves special mention. He has successfully led many working groups for automatic image recognition and analysis. The Photogrammetric Image Analysis (PIA) conference series established itself under his leadership as one of the most prominent meetings of ISPRS, mainly because the scientific quality of the conference proceedings (and subsequently of the presentations), increased significantly through the introduction of the double-blind peer-review. It was then no wonder that Uwe Stilla also decisively shaped the ISPRS Congress 2016 in Prague through his role as Vice-President of the International Programme Committee. For his long-term commitment, he was awarded the ISPRS Willem Schermerhorn Award in Prague.

With more than 580 publications, Uwe Stilla has created a comprehensive scientific oeuvre. The list of Best Paper and Best Contribution Awards is long. He is currently the most cited photogrammetrist in Germany and - although not active in computer science himself - also occupies one of the top places in the citation rankings in this, by far larger, neighbouring discipline of photogrammetry.

Uwe Stilla's life has now come to an end far too early. Although already marked by his serious illness, he never gave up on his life and his work. He filled his office until his regular retirement, and continued to guide his doctoral students to the completion of their dissertations until the very end. Together with Uwe Stilla, we had a lot of fun and pleasure on various occasions and on journeys all over the world, and incidentally learned a lot about the life of foxes - a subject that was close to his heart since childhood. From the bottom of our hearts, we wish that Uwe Stilla could have enjoyed his well-deserved retirement together with his wife for a much longer time.

With the passing of Uwe Stilla, the German and the international photogrammetry and remote sensing community has lost an outstanding scientist and great supporter, not only of young scientists. Our thoughts are with his wife and family.

Uwe will be gratefully remembered as a companion, a colleague, a mentor and a friend.

Christian Heipke, Ludwig Hoegner, Thomas H. Kolbe and Uwe Sörgel