Jos Roerdink (Ubbergen, 1954) is Professor of Scientific Visualization and Computer Graphics at the Faculty of Science and Engineering (FSE) of the UG. When he was appointed Associate Professor in 1992, the Department of Computer Science only had a handful of students and staff. His effort and vision helped him to create a strong, internationally recognized, leading institute. As a professor, he established a course unit in Computing Science as well as the new Scientific Visualization and Computer Graphics research group, and led the successful merger between the ALICE research institute and the Johann Bernoulli Institute. Roerdink is therefore regarded as an important cornerstone, who was impartial and consequently able to unite computer scientists and bring the field together and keep it that way.

**Pioneer in the field of visualization and computer graphics**

Jos Roerdink studied Biology and Physics in Nijmegen, where he subsequently gained his PhD in the field of Theoretical Physics in 1979. He continued his scientific career in Utrecht, San Diego, and Amsterdam, and eventually took up a position at the UG in 1992, where he continued to work until his retirement in 2021. In 2003, he was appointed Professor of Scientific Visualization and Computer Graphics. He also held a chair at the UMCG since that same year. His research focused on the interface of mathematical morphology, biomedical visualization, neuroimaging, and bioinformatics. In addition, his authoritative pioneering work in the field of data visualization has resulted in important breakthroughs. Roerdink's strength lies in his sharp eye for abstraction, precision, and algorithms, combined with a passion for applications of visualization, in particular in the medical, biological, and astronomical fields. In 2000, he published an article describing a revolutionary theoretical way to present and modify digital images. His 'watershed transform' is a fundamental mathematical principle that is used, for example, as an algorithm for security cameras to recognize car registration plates and faces, and is also used in medical image processing, for example to identify tumours. Another application lies in the field of neurosciences. Together with his group, Roerdink has created an integrated visualization which brings together all graphs made by means of scans, EEG, and sensors.

**Outstanding articles and awards**

Over the years, Roerdink has made hundreds of outstanding academic contributions. One of his articles was cited over 1800 times, and his works in general have been cited more than 7000 times. There was a good reason why he was awarded the Best Paper Award at the 2009 IEEE Visualization, a prize for the world's best scientist of the year in this field. His work excels in terms of academic depth and versatility.

**Unite and lead**

Roerdink has made a great impression as an administrator as well. Both within and outside the University, he is known as someone who is extremely good at uniting people, likes to lead new developments, and is not afraid to swim against the current when necessary. He is second to none when it comes to connecting not just people, but disciplines too. For example, between 2012 and 2015 he led the Faculty-wide initiative to internationalize all Bachelor's degree programmes. In this sensitive process, he managed to get all the relevant parties on board and forge strong ties between them.

**Successful merger between two research institutes**

Roerdink's most exceptional administrative achievement was the way in which he managed to connect representatives of the departments of Artificial Intelligence, Mathematics, and Computing Science during the merger between the research institutes ALICE and the Johann Bernoulli Institute. He talked to everyone in a bottom-up manner and provided insight in their joint interests. His impartial and honest attitude, his calmness, and his keen eye for everyone's interests helped him to gain the trust of all parties involved and create a joint identity that would form the basis for what the Bernoulli Institute for Mathematics, Computer Science and Artificial Intelligence is now. It was partly thanks to Roerdink's diplomatic skills that the merger was successful: the northern Netherlands now have a renowned institute that scientists feel highly involved in, which is an exceptional achievement. Without his efforts, Mathematics, Computing Science, and Artificial Intelligence research in Groningen would not be doing as well as it is today. His appointment as Director of the new institute in 2018 was therefore widely supported.

**Excellent PhD supervisor**

In addition to his research and administrative work, Roerdink also successfully supervised 20 PhD students. He continued this work after his retirement: he is still supervising three PhD students now. He is known for his flawless ability to pinpoint the ways of improving a PhD student's work – and for his exceptionally friendly and funny way of doing so. In particular, international PhD students, who sometimes needed some extra help, could count on his generous support. His reliability, intelligence, and empathy made him an excellent supervisor, whom PhD graduates fondly remember.

**Committees and conferences**

During his career, Roerdink sat on many committees and took part in countless conferences in the Netherlands and abroad. He also chaired and organized many events, for example the EuroVis and IEEE VisWeek, the two most important international conferences in the field of visualization. He was in great demand as a chair thanks to the expertise, independence, and integrity that he brought to the international community, and he organized the EuroVis conference in Groningen in 2016. Within the Faculty he also was often asked to sit on committees, where his abilities to empathize and listen carefully was particularly useful. For example, he sat on the promotion committee for tenure-track assistant professors and participated in the most recent edition of 'Career Paths in the Sciences', the Faculty career planning policy. In addition, at a national level, Roerdink succeeded in bringing the Computing Science departments of all Dutch universities to the table. His linking role is all the more remarkable because he has always been working in a highly competitive field. Roerdink is acclaimed by colleagues around the globe for being a top-level scientist who so often unselfishly made excellent contributions to a field much wider than the field he specialized in.