In Memoriam: Gerhard Woeginger

June 1, 2022

Abstract

This document collects in memoriam articles written about our beloved colleague Gerhard Woeginger by his colleagues.

1 Eindhoven University of Technology

He was unassuming. He was nice. He could think. He could write. And he knew a lot. He died last Friday, April 1, 2022. His name was Gerhard Woeginger, a prolific computer scientist.

Figure 1: Gerhard Woeginger, 1964 – 2022

Some facts of his life and career can be easily summarized as follows. Born on May 31, 1964 in Graz, he studied at the Graz University of Technology, and got a PhD under Franz Rendl in 1991 with a thesis entitled "Geometric clustering, Reconstruction and Embedding Problems: Combinatorial Properties and Algorithms". He became a professor at the University of Twente (the Netherlands) in 2001, and joined TU/e as a professor in Combinatorial Optimization in 2004. In 2016 he moved to RWTH Aachen. During his time at TU/e, he supervised around 10 PhD-students.

Describing the impact of his career on the field is not so easily summarized. He was present in almost every field within theoretical computer science. Social choice, bibliometrics, algorithms (especially online), approximability, computational geometry, and of course, one of his prime loves: computational complexity. His talent to see connections between different problems was amazing. His ability to distill the essentials, and then write it up in a way that it all seemed natural was uncanny. And his drive and enthusiasm to distinguish easy from hard, was absolutely infectious. The math and computer science department of TU/e owes him a lot - we are very grateful for his time spent at the department. His friendliness combined with a deep mathematical curiosity has been a source of inspiration for all around him. That spirit is still part of the department.

He was on the program committee of an enormous number of conferences, he was program chair of ESA1997, MAPSP2005, IPCO2011, EURO2009, and he was on the board of a dozen journals among which OR Letters. He set up, and maintained the P-versus-NP page, a vintage Gerhard-style set of webpages that discusses attempts to settle the P=NP question. To say that he contributed to the Christmas puzzle (Advents Kalender) is an understatement, he single-handedly ensured the existence of it. And there is much, much more to be said.

Above all, he could listen - he was able to identify truth in your unstructured words. And then he'd write the paper, faster than you thought was possible. We will miss his presence at conferences, his revealing questions at presentations, his modest smile when the result was discovered, and his knowledge. He knew about the origins of the term NP-complete, he knew results from faraway times in obscure journals; he also knew about the ideal composition of a darts board, and he knew his soccer.

We remember Gerhard as a friendly colleague with a formidable drive for science. We are shocked by his far too early passing and our thoughts are with those he left behind.

Source: Web page dated April 6, 2022.

2 Aachen University

The Computer Science Department mourns over Gerhard Woeginger

Figure 2: Gerhard Woeginger, 1964 – 2022

Prof. Gerhard Woeginger passed away after a severe illness at the age of 57 years on April 1st, 2022.

Gerhard Woeginger studied and then worked at the Technical University Graz receiving his PhD in 1991 and the venia legendi in 1995 for the area „Foundations of Computer Sciece and Discrete Mathematics". After appointments at the University Twente and TU Eindhoven, he joined RWTH Aachen University in 2016, where he held the Chair of Computer Science 1, Algorithms and Complexity, until his untimely death.

Gerhard Woeginger was the first recipient of the Austrian START-Award, received the Humboldt Research Award, the VICI-Award of the Durch Organisation for Science (NWO), and was a member of Academia Europaea.

His particular interests lied in the various areas of Theoretical Computer Science, in particular, Approximation, Online Algorithms, Scheduling, Complexity Theory, Discrete Mathematics, Graph Drawing, Optimization, Graph Theory, Social Choice Theory, and NP-hard Problems. In all these areas he established himself as a leading scientist.

Despite his unusual broad interest in science, Gerhard Woeginger was not a researcher in an ivory tower: he was knowledgeable in many other areas like History, Technology, and Politics. His door was always open to the members of his chair, to his colleagues, and to students. He received everybody in his very own calm and friendly way and took his time to answer all questions and to help with problems.

His smile and courtesy, his caring and pleasant way were always an inspiration to everyone. His patient and empathic personality also made him an outstanding teacher and mentor. We lose a fundamental researcher and a friend with deep thoughts. We will miss him dearly. With deepest sympathy, the Computer Science Department
You can leave your thoughts on Gerhard Woeginger in our digital Book of Condolence.
Source: Web page dated April 4, 2022.

3   University of Twente

T-shirt, casual pants, a pair of Birkenstock, knowledgeable smile, a certain degree of reticence. That was Gerhard Woeginger. A great mind, a compendium of knowledge in algorithmic methods in discrete mathematics and theoretical computer science, inspiration to so many colleagues and students since more than 30 years, passed away on Friday April 1. We are shocked.

Gerhard, born in 1964, finished a PhD on "Geometric clustering, Reconstruction and Embedding Problems: Combinatorial Properties and Algorithms" in 1991 at Graz University of Technology, under the supervision of Franz Rendl. In Austria. Known to some as the land of the kangaroos, as Gerhard liked to say.

Figure 3:   Gerhard Woeginger, 1964 – 2022

In 2001 he took his first professorship at the University of Twente, as chair of the Discrete Mathematics and Mathematical Programming group. During his time at the University of Twente, he supervised 6 PhD students. In 2004 he moved to the University of Eindhoven, to chair the Combinatorial Optimization group. Since 2016, he was the chair for Algorithms and Complexity at the RWTH in Aachen.

Gerhards scientific contributions are hard to summarize. He was broad. He was interested in all kinds of problems from many areas, but mostly algorithms of all flavours, be it exact, approximate or online. He was passionate for computational complexity at large, the line between easy and hard. He was looking for connections across fields. Last but not least, he published lots of papers on the computational complexity or algorithmic solutions of scheduling problems. Indeed, about sixty of his more than 300 publications are about scheduling.

His interest was authentic, infectious, and he was satisfied only when the work was done and the solution was elegant. And when it was done, he would show this mysterious smile that expressed both satisfaction but maybe also a certain degree of disrespect - because after all, it was not that difficult. The precise meaning of this smile of Gerhard's will remain his mystery.

He was also a teacher with a natural gift. Many of us have listened to his tantalizing research talks. He could make complicated things look simple and easy as no other. In that respect, he was a role model for many of us.

During workshops and conferences, of which he visited many, he also liked to socialize and hang out with friends. Above all, he was the one who introduced the "Mafia" social game to several communities, and he played it with passion until late night or early morning. On such an occasion, he could even get upset if people made unreasonable decisions. The game is indeed big fun. Without Gerhard, it will not be the same.

Gerhard will be missed for so much, and so many little things.

In the name of the Discrete Mathematics and Mathematical Programming group and the whole faculty EEMCS, Prof. dr. Marc Uetz (Chair Discrete Mathematics and Mathematical Programming)

Source: Web page dated April 8, 2022.