Sehr geehrter Herr Professor Purgathofer, dear Werner,

describing the many facets of Werner's academic career is quite an undertaking. I start with a few key points. Werner studied technical mathematics at TU Wien and graduated with the Master thesis "Ein-/Ausgabeprobleme an Mikroprozessor-Bildschirm-Kombinationen". In 1984 he finished his PhD thesis on "Identifikation und verzerrende Skalierung für eine höhere graphische Programmiersprache", which started his lifelong engagement with computer graphics and visual computing. In 1987 he completed his habilitation with the title „Methoden der Graphischen Datenverarbeitung zur Erzeugung realistischer Bilder". Soon after in 1988 he was appointed university professor at TU Wien. In 1985 Werner authored the book "Graphische Datenverarbeitung" published by Springer. Werner can be truly called the father and doyen of Computer Graphics in Austria. Topic-wise, his initial contributions focused on stochastic sampling and its applications in ray tracing and radiosity algorithms. Later on, he broadened the scope of the group and reached out to application domains such as augmented reality, visualization, and visual computing in general.

His engagement in the further development of the informatics faculty have been manifold. He has been head of the now called Institute of Visual Computing & Human-Centered Technology between 1999 and 2019 (more than 20 years!). Before the Faculty of Informatics has been founded, he acted as "Sprecher der Fachgruppe Informatik", later as chair of the faculty council.

Werner's successful activities in the international graphics community have strongly centered around the Eurographics association. Werner has been a member of Eurographics since 1981. He served for many years in many and influential roles, like Executive Committee, Publications Board, and as president of the association. Three times, in 1991, 2006, and 2021, he was the main organizer of the annual Eurographics conference, the most important European scientific meeting in our area. This year's conference was intended to be his farewell event to the community. Due to the current health situation it was finally a virtual conference, but again with his passion for perfection, he and his organizing team including many enthusiastic student volunteers made it an exemplary online experience.

His strong and persistent dedication to positively advance the association has been widely and prominently recognized by the highest awards of Eurographics. He became a fellow of the association in 1997. In 2006 he received the „Distinguished Career Award" and in 2017 the Eurographics "Gold Medal Award". Since 2015 he is the chairman of the Eurographics fellows.

With Werner as driving force, the budding visual computing activities eventually culminated in 2000 in the establishment of

the Vienna Competence Center for Virtual Reality and Visualisation (VRVis), co-founded and chaired by him. VRVis is Austria's leading research center in the field of visual computing. More than 70 employees work with great commitment on innovative application-oriented research and development projects. As co-founder and then scientific director from 2000 to 2020 Werner has been instrumental in securing the long-term success of the center.

Werner has been a passionate teacher throughout his career. He graduated a large number of PhDs (maybe 50+) and a sizable number of his former PhD students have already established successful research groups in the area of visual computing on their own. He was giving many basic lectures with high numbers of students. Examples include "Informatik II", "Algorithm and Datastructures", co-teaching "Introduction to Visual Computing" and various courses on "Computer Graphics". His special topic has been color, where he has been giving a course with the same name. Even before the advent of PowerPoint, Werner was using animated physical foils on the overhead projector. His meticulously prepared slides consisted of manually fabricated bits and pieces and flaps, which he could fold in in succession. Nowadays this would be called an early example of physicalization. It was fascinating how he perfected the explanation of complex concepts, algorithms, and data structures with his elaborately prepared "super-slides". His enthusiastic teaching style has been captivating. He was keen in conveying good

presentation skills to students – for a seminar he was giving a "So Nicht Vortrag", i.e., "How not to give a talk", what a show.

So, I have mentioned many key facts about an outstanding academic career. But how about Werner as a person, the man behind the many achievements and recognitions?

Werner has always been egoistic, very egoistic. Because, "Generosity is the most intelligent type of egoism". What you sow you can harvest many times over. And Werner has always been generous in abundance and in very many ways. An example: The creation of his excellent course material, slides and scripts, took ages to prepare for him. And still if someone of the group was moving to some other place and needed to give similar courses, Werner has been very happy in sharing his resources. In the long run, in most cases there have been very positive returns.

The genesis of our group is another case in point. The graphics group has been sort of an offspring of the Algorithm and Datastructures group of Prof. Barth. Prof. Barth was one of the first computer science professors coming to TU Wien in the early 1970s. At that time such professorships came with a lot of personnel resources, I guess Prof. Barth had about 7 PreDoc positions assigned. After Werner as a young professor started to separate from Prof. Barth and establish the graphics group, these two groups where like a double-star system. Werner's father was an astronomer, thus I think this metaphor fits. Prof. Barth's

group was the big star where Werner as a small dense star (a white dwarf basically) was orbiting and attracting resources from the larger one. Regularly our group was gaining a course here and there, but attached to it valuable research and teaching positions. The group was decently growing, but Werner was immediately sharing these hard-acquired resources with us then young researchers, so that we could pursue our careers ourselves. Werner was fostering a special spirit in the group of playful creativity, strong encouragement and support, with a laissez-faire mentoring style. Thus, a very special group culture evolved. At one point Prof. Barth, a traditional conservative professor upon seeing us going for lunch, remarked to Werner about our group: "They are so many, and they are so loud".

Anita Mayerhofer has been our skillful secretary for many years. Before Anita, our secretarial situation was precarious at best and usually dismal. With Werner's constructive can-do attitude, we did not merely complain, but came up with creative solutions. Alternatingly, on a weekly basis, researchers had to perform simple but necessary administrative tasks, like selling scripts, picking up the mail, aso. We coined a term for this role: "Dodel der Woche" (Fool of the week), this was later euphemistically renamed to "Hero of the week". This is just an example of the cooperative group spirit that Werner generated and which allowed us to circumvent difficult situations in a fun way.

Let me give you another example of Werner identifying and seizing opportunities early on: After the iron curtain went down in the late 80's under Werner's guidance we very soon got into contact with our colleagues from the east, e.g., from Bratislava. Joint student seminars fostered idea exchange and resulted in CESCG – the Central European Seminar on Computer Graphics. It is a student seminar very similar to a scientific conference to expose young student talent early on to the fascinating way of scientific discourse. For quite a number of students this was the start of a successful scientific career. And we could recruit a sizeable number of junior researchers from our neighboring countries. Werner engaged in various other supporting activities with international colleagues, especially also from Eastern Europe. As a token of appreciation, he received an honorary doctorate from a Rumanian university.

In German there is a saying "der Fisch stinkt vom Kopf her", which would literally mean "the fish stinks from the head" or a semantically more correct translation would be "the crap rolls downhill". Werner was stinking – metaphorically – and we were stinking with him. His open, friendly, and supportive character and thinking inspired and transcended to other group members and students. It has generated quite a unique culture that has made our group a special place to work and live. There were even behaviors that some felt were not appropriate for an academic research group at all. An example: as most other groups, we

had our regular Christmas parties where it was always a hassle to find a suitable date in the hectic pre-Christmas period. At some point we simply switched the party type and date and started having Walpurgis night parties at the end of April instead. As it is said, in this night witches are dancing and flying with the devil, so in the invitation female members of the group were encouraged to show up with a broom, male members should show up with a shovel (I guess an early example of gender mainstreaming).

An encouraging research environment in a competitive international setting requires motivation and social interaction: work hard, party hard. Our group is characterized by a rich and diversified social life. Werner initiated the skiing day with people from our group and research colleagues, e.g., from the VRVis. He co-founded Wintergraph, a two-and-a-half-day meeting of basically all visual computing groups in Austria and some colleagues from abroad. Formal talks are in the evening, during the day scientific discussions happen in small groups of two, four, six, or eight people, depending on the capacities of the chair lifts. Werner has been an avid proponent of the Werewulf game, were generations of Wintergraph and Dagstuhl seminar participants were dedicating a significant portion of their night's rest. Werner ensured that our institute and the VRVis were always strongly represented at the TU Ball and with his penchant for ball-room dancing he was basically dancing with everything looking somewhat mobile.

Werner intuitively recognized the importance of young co-workers as the key to success. But how to convey to students in a mass university as ours the fascination of research work? Werner and our group implemented some effective measures. There was a time where in our environment we had more highly-talented students than open PhD positions. Consequently we invented the position of a NiWiMi - Nichtbezahlter Wissenschaftlicher Mitarbeiter, in English, Unpaid Scientific Co-Worker. As soon as an open research position became available, one of the NiWiMis could actually get a paid job. Maybe this concept is bordering on exploitation (which research in some cases actually is), but for some NiWiMis it has been the start of highly successful international careers (Dieter Schmalstieg and Helwig Hauser were among these people). Later Werner initiated the cg-club for highly motivated top-level students especially interested in computer graphics and visual computing. They get the chance to experience the daily life and work at the institute, see how research is done, and learn more deeply about the special interests of scientists working here.

Giving a laudatory speech like this, allows me to talk about myself – who should stop me? I got to know Werner as supervisor of my Master's thesis long time ago. I was truly fascinated by his supportive and cheerful supervision style. At our meetings we did not solve all my problems, but afterwards I always had a positive feeling and mood. When I did my studies, the career prospects

for computer science graduates were excellent (they are still excellent today), but as many of my generation, I did not bother too much over what to do after graduation, there were ample opportunities anyway. I was a care-free boy. So, after I finished the Master's thesis I did something that amazed me myself. I approached Werner and asked: "Give me a job and quick" (well maybe I did not say "quick" but for sure I thought it). What did Werner do? In another example of his generosity and making good use of all available resources, he said: "You can have my position". At that time Werner was already designated as university professor, his position was already created and in the university budget, but for some administrative reason Werner could only be officially appointed some months later, and his new position was sort of vacant. I accepted his offer and I started my university career on a professor position, though not as a professor.

You should not take a role model, but be a role model yourself. In this respect, I reluctantly admit that Werner has been one of the few and very influential role models that I had in my professional career. Talks with him have always been lightning fun and funnily enlightening. His pro-active and constructive attitude made a big difference in very many diverse situations.

Werner has had an extraordinary academic career as a researcher, teacher, organizer, and mentor. But, it his personal and social qualities that make him truly exceptional. Werner - thank you, and as you know: You can check out, but you can never leave.