Obituary – Conrad Mueller

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Conrad Steven Martin Mueller, a pioneer of computer science at Wits and in South Africa died on 23 November 2023. He was born in Johannesburg in 1949, and matriculated at King Edward VII High School. He completed his BScHons at Wits. After spending a short time in industry, and completing his MSc at RAU (now UJ), he returned to Wits in 1981 in response to a call to help a new division as it was emerging into an independent Department of Computer Science. He spent the next 33 years at Wits, rising through the ranks to associate professor. He served as Chair of the Governing Committee and then Head of School for about 10 years.

Conrad quickly proved himself to be an extremely dedicated teacher in a really tough environment. Wits, as an established research university, considered Computer Science to be an upstart new discipline, particularly as few members of staff had PhDs in the early days. Conrad's great strength was the time and interest that he put into the people around him. As a teacher he is fondly remembered for the one-on-one work that he did with students. In the 1980s and 1990s it was common to find a queue of students outside his office getting help. He would spend hours with students helping them debug their terrible code, and more importantly teaching them and fostering independent thinking.



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Conrad mentored young members of staff, advising them on teaching strategies and how to deal with various teaching and administrative problems. He could always be relied on to read drafts of research papers critically and constructively and was happy to listen to research problems and talk through possible solutions even for projects outside of his area of expertise. Conrad was always prepared to take on administrative tasks, large and small, and sheltered the younger members of staff from that work. This nurturing mentorship launched several academics into their own successful careers.

Conrad had to be pretty tough to protect and help build computer science as a discipline. Yet in the end, the new department met with some great successes, particularly students who went on to become industry leaders.

Conrad was an old-fashioned scholar – he read widely and deeply and had an open sense of enquiry. He taught a wide range of computer science courses from first year to honours. He made important contributions to computer science education research. His research passion was computer architecture – he recognised early the limitations of the von Neumann architecture and proposed alternative models and programming styles. He completed his PhD in the late 1980s under Judith Bishop – *Towards removing sequential ordering in programs* – and continued work on this theme for the rest of his life.

Conrad was active in SAICSIT for many years, and published both in *SACJ* and in the annual SAICSIT Conference. For many years he was production editor of *Quaestiones Informaticae*, the predecessor of *SACJ*.

As a son of German and Swiss immigrants who had seen the rise of fascism in Europe, Conrad was brought up to oppose apartheid. He was a member of Mervyn Shear's "Peacekeepers", a group of academics who in the 1980s would put themselves between the police and students in an effort to restrain police violence, and active in the anti-apartheid Union of Democratic University Staff Associations.

After Conrad reached mandatory retirement age, he taught at Tshwane University of Technology and continued to supervise postgraduate students at UNISA. He was also elected to the Wits Executive Committee of Convocation and was one of the Convocation members of the University Council. He gave great service to the university and could be relied upon to take on unglamorous jobs. He showed particular commitment and personal courage during the Fees Must Fall protests.

Conrad was always a great personality and someone who was a good friend as well as a colleague. He was also a pioneer of good coffee. The departmental wine club, Turing Tipplers, held his sense of taste and smell in high regard. He often entertained colleagues at home, and would show immense kindness to new members of staff, putting them up and even schlepping them around town. In cases of personal crises, he was always willing to help. His unusual turns of phrase – Conradisms as his staff irreverently called them – can't be repeated (though they never fell on flat ears). You had to be there to appreciate them.

Conrad's sense of what was right meant that he sometimes would not compromise. He could not resist the temptation to argue or disagree with positions that he thought were wrong. As a result, he could drive his colleagues to distraction and was the bane of generations of Deans and Vice-Chancellors. But his sincerity and passion left Wits and computing in South Africa a better place.

He is survived by his partner Judy Backhouse and sisters Ann-Christine Andersen and Jane Mueller.

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