## A Day in the Life of...

## Hal Berghel

Name: Hal Berghel

**Title:** Professor and Chair of Computer Science **Company:** University of Nevada at Las Vegas

How I arrived at my present job (academic and other influences): I came to computer science through the back door (a "re-tread" as they say). My interests in graduate school were in logic and linguistics - skills, incidentally, that have served me well for the past twenty five years in computer science. I fell in love with computing when the first micros were sold in the mid-1970's. These were great times because by the time you got all the parts connected, and the software running, you knew how every aspect of the machine worked. Contemporaneous with my fervor for microcomputer experimentation was the connection of digital circuits, architecture, and formal languages courses with my graduate work in logic and linguistics. I thought that computer science would cater to my experimentalist inclinations and also satisfy my research curiosities at the same time. It doesn't get much better than that, I reasoned, and I've been in computer science ever since.

How I organize my day: I usually arise around 6:30-7am and begin thinking about how I need to organize my time to meet current deadlines. Unless there is some pressing issue, I try to clear all of my email as quickly as possible. Then I tackle all of the tasks that I really don't want to do. I don't allow myself to do anything interesting until the boring stuff is completed as promised and on time. If I'm lucky I have some of the morning left to develop courseware, review literature, speak with colleagues, write, etc. The afternoon is highly goal-oriented. It's at that time that I make sure that I'm making adequate progress on all of my active projects.

Amount of time spent working daily (at home and office): In the past, as a researcher and administrator, I'd work as many as 60 hours/week. Now I have to establish a balance between my career and my family obligations that include three young children. At the moment, I work about 50 hours per week on average, adding in full weekend days whenever I'm travelling which is several times a month.

What I do to get myself thinking creatively: Nothing. I have a constant flow of new ideas from experimental computer science to guitar chord progressions. I'm less successful at filtering the bad ideas from the stream.

My problem-solving strategy: Problem-reduction. The first energy I invest seeks to determine what the "real" problem is (a major cause of administrative and management failure is the inability to distinguish between the real problems and the apparent ones). Then, I apply a problem-reduction strategy until I reach a sub-problem which is manageable, then develop the least-invasive/obtrusive tactic to solve it. Once solved, I move back to the next decision point, and proceed back up the tree.

What I do to relieve stress: Manual labor, gardening, construction, etc. and playing guitar. If I'm moderately stressed out, I'll play along with a Jimmy Page or Eric Clapton cd. If I'm close to the edge, I'll put in a new water heater or re-wire the kitchen.

My hero, mentor, or person I most admire and why: Too numerous to mention. I won't even attempt to list my heros in computer science for there are many, and I'm afraid I'd leave out someone important. I will say, though, that there are five necessary conditions for hero-status in my world: (1) passion, (2) vision, (3) introspection, (4) the willingness to take risks (especially when it would be far more convenient and profitable to do otherwise), and (5) an absolute commitment to have an impact and to make a difference. My public heros form a variegated group - from Galileo and Copernicus to General Billy Mitchell, Nikola Tesla, Edwin H.Armstrong, Jack Northrop, Philo Farnsworth, Frank Serpico, Bob Dylan, Phil Ochs, Larry Pressler (the only Congressman who refused to accept a bribe during the ABSCAM sting), the whistle-blower who initiated the current litigation against the tobacco industry for deceiving the public all these years, and Fr. Miguel Hidalgo to name but a few. In general, my heros are a disagreeable lot of social mavericks and malcontents, with an occasional exception like Shania Twain. In general I take inspiration from their lives and, though falling short by comparison, come away better for the experience of having learned about them.

How a negative event changed my life in a positive way: Almost all negative events force me to concentrate my energies on their positive counterparts. Negative events are just as useful in building character as positive ones, just as finding out that an idea or invention doesn't work can provide as much useful information as finding out that it does.

One event or decision in my life I wish I could go back and change: No major regrets, though a few minor ones. I wish that I had undertaken a serious study of music theory as a child. Lack of music education put the death knell on my otherwise uninspiring songwriting career. I now realize that trying to internalize music theory by osmosis, especially by playing rock and roll, was sub-optimal and misguided. I also wish that I had taken Spanish in school because of the deep affection I have developed for the Mexican people and their cultures over the past 30 years.

What values are the most important to me and what I value in others: Personal integrity, honesty, vision, the willingness to take risks, the ability to look beyond the immediate and superficial to attempt

to accomplish something of importance, the wisdom to exercise power for the sake of the group rather than individuals, conscious commitment to time management, gratitude, anonymous generosity, and most importantly, the respect for the time of others.

What inspires, motivates, or gets me excited about my job on a daily basis: Ability to help others accomplish things of enduring value. In my present capacity as an academic administrator, I make it clear to the faculty that I am there to serve them and that I will measure my success through my ability to help them achieve their goals. I eagerly seek out leadership opportunities, while willingly accepting the managerial ones.

**Biography:** Hal Berghel is Professor and Chair of Computer Science at the University of Nevada at Las Vegas. His research interests include electronic information management, particularly with an emphasis on ill-structured data, software and interface architectures, information agency and highly interactive and participatory systems.

Berghel was also the co-founder and Chairman of the Board of Directors of the Arkansas Society for Computer and Information Technology (ASCIT). He is a past member of the ACM Publications Board and is currently Vice Chair of the ACM Member Activities Board. He is also past Director of the ACM Lectureship Series, and remains chair of both the ACM Technology Outreach Program, and the ACM Electronic Communities Committee.

Berghel has been selected the ACM Outstanding Lecturer of the Year three times (1996, 1997 and 1998), and has also been twice selected as an IEEE Distinguished Visitor on behalf of the IEEE Computer Society. His many awards and recognitions include the 1996 ACM Distinguished Service Award "For wide-ranging contributions to experimental computing and service to the computing community" and induction as a Fellow of the ACM in 1998 "For wide-ranging contributions to the arts, sciences and practices of information processing and distinguished service to ACM."