My journey (Mikko's example article for the IEEE STCSC newsletter)

In this feature we ask a prominent researcher in the field of sustainable computing to share their journey and lessons along the way with the broader community. In this issue we have the privilege to sit down with Mikko Carlsson, most known for his research on sustainable waste recycling and adaptive low-power residence surveillance.

Name: Mikko Carlsson
Current position: Self employed, Linköping, Sweden
Past affiliations: Saskatoon Street Patrol, Calgary Dog Squad
Alumni: Prince Albert Street School, Saskatchewan, Canada, 2008

Currently working on: Motivated by recent findings in frequency scaling, Mikko is combining adaptive sleep cycles and frequency scaling to minimize the energy consumption in state of the art residence surveillance.

Favorite memory as a student: Back in PA this other student told me that there is very good job security in home surveillance. He was right! After trying a few temporary employments, I found a boss that I could see eye-to-eye with and since then life has been good. The job brings food to the table, is exciting, and I occasionally get a chance to travel. My favorite travel spots are the Canadian Rockies, as well as the cabin of my employer's parents.

Could you share a research contribution from your research, and explain why this is something that you are particularly proud?
Well, as a road scholar I occasionally take my services on the road. This often involves cleaning up the neighborhood from Complex Angry Treats (CATs). While most of my research is on the domains of lower-power surveillance, this vain of research often involves more high-powered efforts, which under ideal circumstance involve studying the problem up close (from the base of a tree, for example).

Explain one thing that makes your work exciting for you?
I get paid multiple times a day. The job is particularly rewarding when new skills are acquired or I am showing of my existing skill set for my boss.

What do you think is the most important problem(s) to be solved in the next 10 years within sustainable computing?
Recently, I have been inspired by work on CAT free neighborhoods. I think this will significantly help towards a more pleasant environment for future generations.

What courses and skills are most important for students wanting to work in this area?
If I was a student today, I would probably make sure to learn more about mining large datasets. Recently, a group of researchers in my neighborhood have begun sharing CAT observations. A few of the researchers simply broadcast observations to the others which records the information in log files. (Using our current protocol, occasionally broadcast messages are acknowledged.) This has resulted in a huge database of CAT sightings, which is expected to provide endless opportunities for potential solutions to the CAT problem.