

# Teaching Statement

David A. Shamma • Centrum Wiskunde & Informatica • [aymans@acm.org](mailto:aymans@acm.org)

*I believe teaching is about critical practice in the domains of social computing, multimedia, journalism, and art where students should learn & understand the theoretical underpinnings of the domain.*

## Teaching Style

Throughout my career, I have taught classes in Computer Science, Journalism, and Studio Art. I approach most of each of these disciplines in a similar manner where the class lectures are based on theoretical readings while assignments are based in building and creating new systems, tools, and/or artifacts. I find this system works exceptionally well for classes that are transdisciplinary or that have a mixture of technological expertise beyond the conventional group pairing of CS students with non-CS.

There are two key components for this process. First, the readings are to serve as a discussion between the students and myself. This requires the students to host discussions in the class as well as outside of the class room. For example, after receiving my Ph.D., I taught News and New Media at the Medill School of Journalism in 2006. I was the first instructor to introduce a blog for the students to participate in the greater classroom discussion. In a journalism class, students have a broad spectrum of technical expertise. The students who were programming savvy used the blog as a platform for embedding or scripting new experiences while the more traditional journalism students could focus more on the discussion components and existing infrastructures enabled by the classroom blog<sup>1</sup>. The key here is to specify requirements for the students to satisfy coupled with some freedom to mold the experience as they see fit. As an instructor, this also allows me to find the spots to challenge individual students. I found this is manageable for a medium sized class without a teaching assistant. Second, if it logistically works, a lab or studio time is essential for some classes. Of course, for studio art classes this is built into the schedule, but other domains require a laboratory or practicum session. In the cases where this was impossible due to the course schedule, I held intermittent sessions which were either all practicum or half discussion lecture and half studio. I have had many students contact me after graduation out of the blue telling me how my class helped them gain great perspective on either their continuing education or the new job.

Recently, while on sabbatical at the National University of Singapore, I co-advised a class for architecture students who were using Arduinos to build children devices for play and health. Here, in the studio portion of the class, I helped the students theoretically frame their ideas, as well as, helped them understand and build some of the more complex systems they were trying to build. As they did not have much programming experience, computer science basics like serial communication needed some explanation where they could then build what they wanted. And in the cases where they could not meet the technical programming challenge, I worked with them on building a Wizard-of-Oz system; in fact I introduced that concept for the students in the class.

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<sup>1</sup>I was the first instructor to bring blogging into the class within the Medill School of Journalism

## Advisement

Advisement and mentoring is critical to teaching and leading a research group. I have always been in a leadership role as a peer (in graduate school and as part of an industry research group) and as a mentor/group leader. I strive to help others excel in the work they are doing while providing steering when needed as well as bringing new contexts into the work. At Yahoo Labs, I ran a research group of 5 Ph.D.s—some fresh from graduate school, some with many years of post graduate experience. Additionally, I oversaw the intern supervision for the group (as many as 5 interns a summer) as well as I have many student contractors who work with my team year round. For everyone in my team, I adjust my meeting schedule with them based on their preference. Some researchers ask for more contact, some thrive on light steering. For the interns, it is *critical* to me that they find research tasks they enjoy and want to do; I do not just hand research tasks to them nor do I hand engineering tasks to them (this is an industry lab). Taking ownership and learning leadership is as important as the quality of the research itself and this is something I hold true for the Ph.D.s and students alike. Recently, Bart Thomée, a researcher I brought in as a Post-Doc and later promoted him to Scientist then Senior Scientist, won the 2016 ACM Multimedia Rising Star Award for the work we pioneered. More recently at CWI, an academic lab, I have been leading a group of researchers from Post-Masters to Post-Docs to an Assistant Professor in the same effective manner.

Beyond this, I founded and lead all scientific research efforts at Flickr. This involves coordinating research efforts with other scientists in labs as well as within Flickr itself. This also poses a strong challenge as it involves teaching a new culture and practice of research to scientists and engineers. Again, I turn to flexibility as I do with teaching when people come from different backgrounds. There is no one path rather the path of producing high quality, meaningful research must be jointly formed and this happens through understanding requirements from both disciplines and finding the right path for learning and research advancement.

## Curricula

In most every course I've undertaken, I've revised the department syllabus with the department adopting my syllabus as the new baseline for teaching. I start by determining the core requirements then growing the course to incorporate new emergent areas. In technology, there is almost always a new topic or area to cover. To do this, some prioritization has to take place.

New courses creation is a greatest challenge and a great pleasure. Recently, I saw on the University of California School of Information's Data Science Advisory Board where, along with several academic and industry professionals, we built out their new data science courses and degree. Here, I not only brought industry requirements (being a Master's program many of the graduates are slated for industry jobs) but also underscored the theoretical pinning that are not only a requirement for a Master's degree but also critical to the success of the industry bound student.

Beyond full classes, I have lead many workshops and courses at conferences: ACM CHI, ACM MM, ACM Creativity and Cognition, and the International Semantic Web Conference. In 2014, I co-ran two courses (one on Geo-HCI at CHI and the other on Interactive Arts at MM). In both courses I developed the materials with my co-instructor from scratch and both courses were well received and well attended. More so, these are topic areas which have yet to make a course appearance and half of the attendees were first timers at the conference and pointed towards the exciting schedule and readings as attractors. One course attendee in MM Art course came because "I attended your other course earlier and know you're a great speaker so I thought this one is going to be great too."