State Transitions

David Alan Grier, George Washington University

Unlike almost every other challenge in the computing community, there's nothing beyond good intentions to guide those transitioning from student to professional.

The baby had yet to arrive, but the rest of Michael’s new life was starting to become real. A year after finishing his doctorate, Michael was starting a teaching job at a university in a new city. The transition had been extended by an opportunity to work at an Internet company for six months. As a result, Michael didn’t fully appreciate his new identity. He described his roles, assignments, and responsibilities as if they belonged to someone else. As he talked, he was more like the graduate student I knew the year before than the professor I expected to see.

The transition from student to professional is one of the most difficult problems in technical education. Yet, unlike almost every other challenge in the computing community, there’s nothing other than good intentions to guide those in the midst of it. We have no standards, no literature, and no structured curriculum for this problem. The good intentions are important, but they don’t create a professional.

This year’s Errant Hashtag column will explore the transition from student to professional life.

Michael started the transition as something of a rebel, a graduate student who shunned conventional research, instead looking at subjects that didn’t seem to have much to do with computing. He organized a seminar to explore the theory behind his work. Several colleagues and professors participated in the seminar from a distance, listening on Skype as the presentations jumped from game theory to psychology to sociology to economics. It was clear to all of us that some new creature was in the process of being born, but none of us was sure that it was actually part of computer science.

Michael’s rebellion started to ebb when he finally arrived at his new campus. I asked if he was going to continue to hold his seminar, but he deflected my question. There were new, unforeseen responsibilities: two senior professors had suddenly departed, leaving no one to direct a popular and fairly conventional set of classes. There were also doctoral students, committee assignments, National Science Foundation reviews, and conference deadlines.

When I asked Michael how he was coping with the new workload, he grinned, shrugged, and said, “I really don’t know.”

Three months after I last saw Michael, the baby arrived. The pattern was familiar to those who’ve observed the process: for a week or two, Michael’s life was chaotic but filled with new prospects; the most common of tasks held uncommon import. Yet, parenthood isn’t a role that accommodates rebels. It presses responsibilities upon us and instructs us how to live for others. Its lessons are often invisible, especially to those closest to the process. If Michael’s new son is like the rest of us, he’ll find it hard to imagine how his parents met, to appreciate that his father worked as a graduate student, or to conceive of how his father once pushed the boundaries of computer science. All he’ll know is the person who made the transition.