

I am honored to be a faculty member at the University of Colorado Boulder and feel privileged to represent my department, college, and university in the scholarly community and society at large. I see service as an essential part of being a faculty member to contribute to the common good of society. My service efforts have been driven always by considering how I, at the current stage in my career, can best represent CU and help the university succeed in its educational and research missions.

Service to the CU Programming Languages and Verification Group

I have placed strong emphasis on organizing a community around the faculty whose research interests are most closely related to my own with the following goals: (1) collectively raise the profile of research at CU, (2) build a cooperative, collaborative, and supportive community for our graduate students, and (3) coordinate efforts to maximize the use of our resources. To this end, I have coordinated maintaining the public-facing website;¹ the internal mailing list, wiki, real-time chat (Slack), and version control services; weekly seminars; weekly reading group; and twice-weekly “stand-up” status meetings. This organization has led to a tight-knit community, for example, with students self-organizing practice talks and other meetings by themselves without faculty involvement. This community has also been a strong selling point in recruiting new Ph.D. students—in at least four cases, we were able to successfully recruit a student from competition at higher-ranked departments.

Service to the Department of Computer Science

My approach to department service has been to take on roles where I can best contribute to the collective good of the department.

I am presently serving on the Executive Committee (since Fall 2015). In this role, I am representing the junior faculty in discussing issues that concern the department leadership. I sought this experience to gain insight into the decision making process as I prepare to potentially take on future leadership roles in the department.

For the past two academic years, I have also served on the Faculty Search Committee. In this role, I have taken an active role in the reviewing, screening, interviewing, and recruiting of candidates, and I have taken a particular interest in increasing the engagement among our Ph.D. students in faculty recruitment. I worked with a Ph.D. student committee chair to develop process for student engagement in faculty recruitment modeled after a process from Berkeley.

I have also served as the Colloquium Chair for the department from Fall 2012 to Spring 2016. The primary role of this position is to coordinate the scheduling and advertising of our weekly colloquiums. In this role, I have also tried to raise the profile of our colloquium series by recording the sessions and making the content available on-line.

Earlier, I served on the Graduate Committee for five consecutive semesters (Spring 2009 to Spring 2011). One of the most important responsibilities of the Graduate Committee is graduate admissions and graduate recruiting. In 2009 and 2011, I co-organized the Ph.D. Student Recruiting Weekend. This event is hugely important for recruiting the most promising Ph.D. students. It is at this event that we are able to showcase the depth and breadth of exciting research taking place in our department coupled with displaying Boulder as a great place to live for their next five or six years. Organizing this event is a significant undertaking for the entire department, as we host 30–40 prospective students for two full days, requiring careful coordination between faculty, staff, and current Ph.D. students. Anecdotally,

¹CUPLV Website: <http://plv.colorado.edu>.

students who we successfully recruited often say that their experience at the recruiting weekend is what became the deciding factor for choosing to come to CU.

Service to the College of Engineering and Applied Science and the University

During the 2011-2012 academic year, I served on the Faculty Search Committee in the Department of Electrical, Computer, and Energy Engineering (ECEE). One goal of this search was to foster stronger connections between ECEE and Computer Science (CS), which has been a component in my efforts for the CU Programming Languages and Verification group. This search resulted in the hiring of two new faculty members: Profs. Pavol Černý and Eric Keller. Both of these hires have strengthened the connections and collaboration opportunities between ECEE and CS, not only for me but for other faculty. Prof. Černý has collaborated with me as part of the CUPLV group, and Prof. Keller has collaborated with Prof. Rick Han in Computer Science.

For the College, I evaluate transfer credit for computer science courses, and for the University, I have taken part in reviewing proposals for the Innovative Seed Grant Program.

Service to the Research Community

I have provided external reviews to over thirty conferences and journals (see my CV for a complete list). Since joining CU, I have served on twelve program committees, including the most major conferences in my field—Principles of Programming Languages (POPL) in 2016 and Programming Languages Design and Implementation (PLDI) in 2017. Serving on the program committee of POPL or PLDI is an honor with great responsibility. Because these publication venues are so important to the community, the process expects program committee members to review 20–25 dense, full length papers without sub-reviewers, to interact with authors through one round of question-response, to deliberate in an on-line forum with other reviewers for a period of a few weeks, and to finally meet in person as a program committee to make and agree upon the acceptance or rejection decisions.

I have also served my research community by sitting on three NSF in-person proposal review panels. The process for NSF proposal review panels is similarly rigorous: reviewing approximately 7–10 proposals and then meeting in DC to deliberate and rank proposals.

Also for the research community, I have served on the external review committee at major conferences, and I have supported junior researchers in judging student research competitions. In 2013, I was asked to chair the Tools for Automated Program Analysis Workshop and since then have served on its steering committee.

I also served as co-treasurer or treasurer for the Principles of Programming Languages Conference from 2010 to 2014. The role of this position is to work with the general chair of the conference to manage a budget with more \$200,000 in expenditures. The position is multi-year to provide continuity for the conference from one year to the next and is intended for a junior, untenured researchers to enable them to interact with the most senior members of the community. In this role, I have worked with Dr. Thomas Ball (Microsoft Research), Dr. John Field (Google, formerly IBM Research), Prof. Roberto Giacobazzi (University of Verona), Prof. Suresh Jagannathan (Purdue), and Dr. Sriram Rajamani (Microsoft Research).