



Call for nomination - Systems Fellows Program (2019)

Solving today's most complex societal problems presents a challenge that requires more than a range of expertise and advanced knowledge in different domains. It also requires integration of breakthrough technologies, cutting-edge analytics and progressive research, with an understanding of human interaction, policy implications, and governance. Such problem-solving calls for a new research approach with a holistic perspective that seeks to uncover and investigate hidden interconnections between different elements of a system and takes into account the unique role of humans.

The Systems Fellows Program supports graduate students who want to participate in the convergence of knowledge and expertise from diverse disciplines to identify, formulate and address a complex system problem. This approach requires faculty and students to explore research questions at the intersection of their respective fields, conduct joint research projects and develop methodologies that can be used to re-integrate knowledge in pursuit of a new science of systems. Examples include (but by no means are limited to): research projects in developing a technology that also investigate the effects, reception and implications of the technology on humans, society and social interactions; or studying the advancement of secure communication while explicitly addressing the policy implications.

Purdue Systems Collaboratory invites faculty from all Purdue colleges to work with colleagues from other Purdue colleges and nominate their outstanding PhD students for the Systems Fellows Program.

Student eligibility and responsibilities

- The student's research must be related to addressing a systems problem or advancing systems science
- The primary home of the student is in his or her home college, and is co-supervised by a faculty from another college
- The student nominee must have completed at least one year of his/her graduate research program
- Assistantship recipients are required to submit an annual report outlining their progress and showcasing the relevance of their research to systems thinking/science
- Systems Fellows will be required to contribute to the Collaboratory's activities (for example, assisting with seminars and courses, mentoring, course coordination)
- The program is open to graduate research students from all colleges

Fellowship support

- The Purdue Systems Collaboratory provides 50% of the student stipend and tuition, per year, renewable for up to three years, contingent upon satisfactory academic and scholarly progress and work performance
- The remaining 50% of the student support is provided by equal contributions of the faculty co-advisors or their departments*

Students should submit their application via this link by March 31st, selected candidates will be notified by the end of April. Required documents for the submission are (in one pdf file with file name as "student first name-last name"):

- A research project summary of no more than two pages describing the nature of the student's research topic, highlighting its "systems perspective"
- A short "management plan" outlining the role of each advisor, how the background and expertise of each advisor support the research topic, and a proposed schedule for interaction of the team
- Short NSF-style CVs of the two faculty members, CV and academic transcript of the nominated student

^{*} The Collaboratory's Systems Fellows Program can be used in conjunction with other fellowships/assistantships, for more information, please reach out to Boshra Afra (afra@purdue.edu)