

"Killer Examples" for Design Patterns Statement of Interest

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My adventure with design patterns began when I started working in the industry after graduating from college. At work, I joined a seminar group that was discussing the “Design Patterns” book. I realized very quickly that the book was teaching sound object-oriented techniques that I did not learn well in my university education. But design patterns were more than teaching tools; they inspired the members of our seminar group to design better systems.

Currently, I am a PhD student. My transition to academia was inspired mostly by the exposure to design patterns. I returned to school to explore better ways of making design patterns accessible to the real-world developers. At the present moment, I am researching the topic of using software metrics to discover opportunities for introducing design patterns in the existing code. Ideally, I am envisioning a tool that can analyze existing code and detect places where a design pattern could be used. Moreover, the tool would produce such code. The underlying goal of my project is to make design patterns more accessible and easier to apply to real-world projects.

Concurrently with my research work, I have been working as a teaching assistant for the graduate-level object-oriented design course in my university. One of the primary topics of this course is design patterns. I have gained new insights about the teaching aspects of design patterns by observing how students perceive and learn them.

I would like to participate in the “Killer Examples” workshop as a discussant for two reasons. First, because good examples are sufficient to describe design patterns. Experienced software developers will understand a pattern just by reading the example and students are more likely to remember a good example than a fancy name. This means that we should put more effort on finding good examples and describing them. But a more important reason for me is to ensure that the discussion in the workshop is not focused strictly on the academic use of design patterns. It is true that good examples are needed to improve the quality and marketability of teaching design patterns in the universities. But “killer” examples are even more likely to speak to practicing professionals. Good examples can lead to better pattern books and even wider penetration of patterns in the industry.

In short, I represent a unique point of view that I can contribute to this workshop. I am a student, a researcher, an educator, and a working practitioner. I understand the role that design patterns play in each of these roles. By participating in this workshop, I would like to ensure that all these points of view are represented.