SPLTea 2014

1st International Workshop on Software Product Line Teaching held in conjuction with SPLC 2014, 16 September 2014, Florence, Italy http://spltea.irisa.fr

1. MOTIVATION AND GOALS

With around two decades of existence, Software Product Lines (SPL) are now well-established in research and industry. The body of knowledge collected and organized by the SPL research community is still growing. Also, the scope of the community continuously broadens to other areas such as software ecosystems and dynamic adaptive systems.

Without any effort for disseminating this knowledge, engineers of tomorrow are unlikely to be aware of the issues faced when engineering SPLs (or configurable systems) – up to the point they will not recognize this kind of systems. In turn, they will not use appropriate techniques and face problems such as scalability that the SPL community perhaps already studied or solved.

We believe education has a key role to play. The teaching of SPLs can enable the next generation of engineers to build highly complex, adaptive, and configurable software systems. Also, research can benefit from teaching: students can be involved in controlled experiments and researchers involved in teaching can identify potential missing gaps of SPL engineering tools and techniques.

Teaching SPLs is challenging. Software engineering itself is a relatively young discipline: it is still challenging to find good teaching methods and the correct place in a rather large and evolving curriculum. Moreover, SPL engineering encompasses a variety of topics, including requirements analysis, design, implementation, testing, and evolution. Another related challenge is to prepare teaching material -- based on existing books, tools, and research papers -- suitable for attracting students.

Currently, it is unclear how SPLs are taught, what are the possible gaps and difficulties faced, what are the benefits, or what is the material available?

This workshop aims to explore and explicate the current status and ongoing work on teaching software product lines at

universities, colleges, and in practice (e.g., by consultants) and discuss gaps and difficulties faced when teaching SPLs, benefits to research and industry, different ways to teach SPL knowledge, common threads, interests, and problems. The overall goal is to strengthen the important aspect of teaching in our community. Future directions for research and practice will be outlined based on needs expressed by the participants. The workshop particularly aims at bringing together researchers and practitioners to discuss their experiences in SPL teaching. We also aim to learn from other communities, i.e., we want to attract submissions that discuss teaching experiences in general and their applicability to the SPL field.

2. TOPICS

We are interested in all topics related to teaching in the context of SPLs. Topics include, but are not limited to:

- Experiences with teaching SPLs to students or practitioners
- Best practices for teaching SPLs
- Innovative curricula or course formats
- Impact of the online education movement (MOOCs) on teaching SPLs
- Innovative methods for teaching SPLs in online courses
- Integration of SPL research into teaching and training
- Continuing SPL education in the face of rapid technological change
- The influence of new paradigms, such as cloud computing or global software development, on SPL teaching
- Ensuring graduated students meet industry needs through the understanding of SPL techniques
- Innovative use of social media for knowledge management in SPL teaching

We are seeking for research papers, experience reports as well as position and vision papers (8 pages max.) in <u>ACM SIG Alternative Proceedings Style</u>. Submissions will be selected based on the relevance to the workshop topics and the suitability to trigger discussions. Accepted papers will appear in Volume 2 of the SPLC conference proceedings published by ACM. Papers should be submitted as PDF files via EasyChair:

https://www.easychair.org/conferences/?conf=spltea2014

4. IMPORTANT DATES

Submission Deadline: June 17, 2014.

Notification of Acceptance: July 10, 2014.

Camera-ready Deadline: July 20, 2014.

Workshop: September 16, 2014.

5. ORGANIZATION

PROGRAM COMMITTEE

Andrzej Wąsowski, ITU, DK Christian Kaestner, SEI, USA Eduardo Almeida, UFBA, BR Jaejoon Lee, Univ. Lancaster, UK Jan Bosch, Chalmers, SWE John D. McGregor, Clemson Univ., USA Klaus Schmid, Univ. Hildesheim, GER Mike Mannion, GCU, UK Natsuko Noda, Shibaura, JP Philippe Collet, Univ. Nice Sophia Antipolis, FR Robert France, Colorado State University, USA Sandro Schulze, TU Braunschweig, GER Sven Apel, U. Passau, GER Tomi Männistö, Helsinki Univ., Fl Tomoji Kishi, Waseda Univ., JP ...and the workshop organizers

WORKSHOP ORGANIZATION

Mathieu Acher, Univ. Rennes, FR Roberto Lopez-Herrejon, JKU Linz, AT Rick Rabiser, JKU Linz, AT

WEBSITE

http://spltea.irisa.fr/

3. SUBMISSIONS