

## **Experimenting application engineering with requirements pattern for software product families**

### **ABSTRACT**

Reuse of software artefacts such as requirements is an indispensable activity in software development. However, practitioners reuse requirements opportunistically without proper planning. Software product line engineering (SPLE) comprises of two main processes known as domain engineering and application engineering. During the domain engineering process, a solid foundation is laid for designing reusable structure, which helps in delineating requirements artefacts and systematic planning for future reuse. Whereas, during application engineering process, systematic reuse of software artefacts is realized taking advantage of the benefits of reuse are utilized in application engineering phase through derivation of various reusable structure initially built in domain application. This paper presents evaluation of systematic requirements reuse framework (RP-SPF) from an experiment in academic setting. The findings of the evaluation show that the RP-SPF approach is more efficient and effective compared to conventional (Ad hoc) of reusing and documenting requirements.