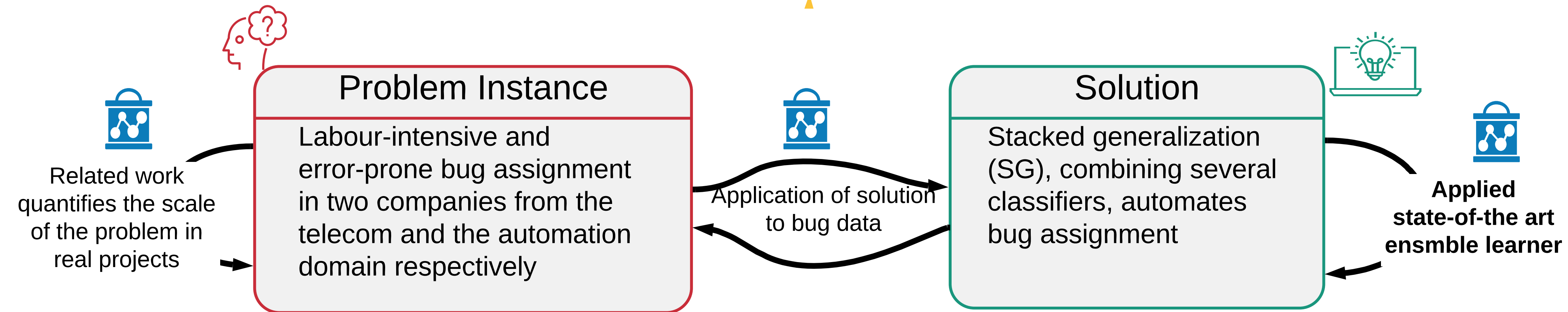




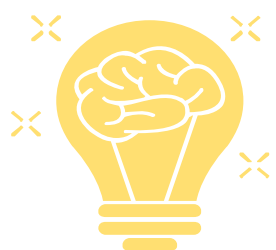
**To achieve more effective assignment of bugs to teams in large scale industrial contexts**  
use ensemble-based learning to automate bug assignment



Problem observed in real projects: Eclipse Platform (Anvik and Murphy 2011), the Mozilla foundation (Bhattacharya et al. 2012), and at Ericsson (Jonsson et al. 2012). Evaluated on data from Telecom and Automation domains.



Evaluated in 5 real projects across 2 companies/domains, on 50 k bug reports, using K-fold cross-validation and sliding window validation.



Precision in automated bug assignment on par with manual (50-89%), which makes it useful in practice, saving cost and time. SG consistently outperforms individual classifiers. When training SG, aim for at least 2,000 bug reports in the training set. Relying only on K-fold cross-validation is not enough to evaluate automated bug assignment.