AIPM：An Integrator and Pull Request Matching Model in Github

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Abstract : Pull Request (PR) is the primary method for code contributions from the external contributors in Github. PR review is an essential part of open source software developments for maintaining the quality of software. Matching a new PR of an appropriate integrator will make the PR review more effective. However, PR and integrator matching are now organized manually in Github. To reduce this cost, we presented an AIPM model to predict highly relevant integrator of incoming PRs. AIPM uses topic model to extract topics from the PRs, and builds a one-to-one correspondence between topics and integrators. Then, AIPM finds the most suitable integrator according to the maximum entry of the topic-document distribution. On average, AIPM can reach a precision of 60%, and even in some projects, can reach a precision of 80%.

Keywords : pull Request, integrator matching, Github, open source project, topic model

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