

Leveraging Software Bots to Enhance Developers' Collaboration in Online Programming Communities

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Software Bots are applications that are integrated into the pull requests



An interface between human and tools

New voices in the pull request conversation

Update dependencies #21

 Open actions-bot wants to merge 1 commit into `master` from `update-dependencies` 



Conversation **0** Commits **1** Checks **4** Files changed **2**

 actions-bot commented 25 days ago Collaborator 



- Dependency updates

Auto-generated by [create-pull-request](#)



  actions-bot force-pushed the `update-dependencies` branch 2 times, most recently from `8b52897` to `53262f7` 18 days ago

  chore: update dependencies ✓ c929891

  actions-bot force-pushed the `update-dependencies` branch from `53262f7` to `c929891` 4 days ago

Preliminary Studies

Characterization of bots supporting Pull Requests

Mixed-methods study on Effects of Bot Adoption

Phase I

Analysis of the state-of-the-practice

Interview with the OSS community

Cataloged Problems

RQ1

Phase II

Participatory Design Fiction

Meta-bot Requirements

RQ2

Design Guidelines

RQ2

Phase III

Conception of the meta-bot

Experimental Study to assess the prototype

Meta-bot Prototype

RQ3

Legend

Completed

Ongoing

Future

Outcome

Bots perform many different tasks and can be **disruptive** to the community

A central problem: bot behaviors are perceived as noise

Employing **Design Fiction** to capture the developers' vision of bots' capabilities