TABLE I
CONTRIBUTOR-LEVEL∗, SECO-LEVEL†, AND/OR COMPANY-LEVEL♯ METRICS USED IN OUR STUDY.

RQs.	Metrics	Description
RQ4 — Diversity	Gender (GD)†	Proportion of new contributors who self-declare as Male (m), Female (f) or Neutral (n) [38].
	Technical (TD)∗	The number of different project teams (technology) new contributors are involved in [39].
	Corporate (CD) ♯	The number of sponsoring companies that contribute commits to the SECO [2].
RQ5 — Productivity	Density (Den)∗	Commit density, i.e., the median proportion of contributed churn over the submitted commits [40].
	Time to first commit (TFC)∗	Number of days it takes for contributors to have their first commit accepted and merged into the codebase.
	Retention (Rt)∗	The proportion of contributors, per category, still contributing to the codebase after N days [9].
	Patch Acceptance Rate (PAR)∗	Probability of a contributor's contribution (pull-request; PR) to be accepted (higher values are better): $$PAR = \frac{\#Accepted\_PRs}{\#Submitted\_PRs} \quad (1)$$
RQ6 — Quality	Effort (Eft)∗	A measure of the number of pull request versions (attempts) necessary before a contribution is accepted (lower values are better; minimum value of 1): $$Eft = \frac{Median\_\#Attempts}{\#Actual\_Commits} \quad (2)$$
	Bug-Inducing commits (SZZ)∗,♯	Percentage of submitted commits that introduce bugs [41].