

Graduate School of Science and Technology Master's Thesis Abstract

Laboratory name (Supervisor)	Software Engineering (Ken-ichi Matsumoto (Professor))		
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Thesis title	An Analysis of Newcomer Candidates' Social Coding and Contributions in GitHub GitHubにおける新入開発者によるソーシャルコーディングおよび貢献内容の分析		
Abstract			
The ability of an Open Source Software (OSS) project to attract, onboard, and retain any newcomer is vital to its livelihood. Evidence suggests more new users are joining GitHub, however, the extent to which they contribute to OSS projects is unknown. In this study, I coin the term 'newcomer candidate' to describe a novice developer that is a new user of the GitHub platform, with the intention to later onboard an OSS project. My objective is to track and characterize their initial contributions using a mixed-method approach. The results show that 68% of newcomer candidates are more likely to practice non-social coding, 48% tend to work on forward-engineering activities in their first commits, and 53% show their interest in targeting non-software repositories. This study opens up new avenues for future work, especially in terms of targeting potential contributors to onboard an existing OSS project. More practical applications would be tool support to (i) recommend practical examples that OSS project teams can use to lower their barriers for a newcomer candidate to successfully make a contribution and (ii) recommend suitable repositories for newcomer candidates based on their preference.			