Mining social networks from software repositories is becoming a popular research area. Mining approaches often use technical artifacts such as source code, or communication artifacts such as emails to create developer social networks.

We describe a repository independent approach of mining task-based communication social networks. In our approach, collaborative tasks recorded in software engineering repositories provide the context of the constructed networks. Developers are connected in a task-based social network if they have communicated about a collaborative task. We demonstrate the applicability of our approach through two research studies that mined the IBM Rational Jazz™ development repository. We then propose practical applications that utilize our approach to directly support development projects.