



## 1. KnowledgeZooClient: Constructing Knowledge Graph for Android

Li Li (1); Jun Gao (2); Pingfan Kong (2); Haoyu Wang (3); Mengyu Huang (4); Yuan-Fang Li (1); Bissyande, T.F. (2) **Source:** 2020 35th IEEE/ACM International Conference on Automated Software Engineering Workshops (ASEW), p 73-8, 2020; **ISBN-13**: 978-1-4503-8128-4; **DOI**: 10.1145/3417113.3422187; **Conference:** 2020 35th IEEE/ACM International Conference on Automated Software Engineering Workshops (ASEW), 21 Sept. 2020, Melbourne, VIC, Australia; **Publisher:** IEEE, Piscataway, NJ, USA

**Author affiliation:** (1) Hong Kong University of Science and Technology, China (2) Beijing University of Posts and Telecommunications, China (3) University of Luxembourg, SnT, Luxembourg (4) Monash University, Faculty of Information Technology, Melbourne, VIC, Australia

Abstract: In this work, we describe the design and implementation of a reusable tool named KnowledgeZooClient targeting the construction, as a crowd-sourced effort, of a knowledge graph for Android apps. KnowledgeZooClient is made up of two modules: (1) the Metadata Extraction Module (MEM), which aims at extracting metadata from Android apps and (2) the Metadata Integration Module (MIM) for importing and integrating extracted metadata into a graph database. The usefulness of KnowledgeZooClient is demonstrated via an exclusive knowledge graph called KnowledgeZoo, which contains information on over 500,000 apps already and still keeps growing. Interested users can already benefit from KnowledgeZoo by writing advanced search queries so as to collect targeted app samples. (0 refs) Inspec controlled terms: Android (operating system) - crowdsourcing - graph theory - meta data - mobile computing - query processing

**Uncontrolled terms:** metadata integration module - metadata extraction module - extracting metadata - crowd-sourced effort - reusable tool - constructing knowledge graph - targeted app samples - exclusive knowledge graph - KnowledgeZooClient - graph database - extracted metadata - Android apps

Classification Code: C6190V Mobile, ubiquitous and pervasive computing - C1160 Combinatorial mathematics -

C6150J Operating systems - C7210N Information networks - C7250R Information retrieval techniques

**IPC Code:** G06F9/44 - G06F9/46 - G16 - G06F16/00

Treatment: Practical (PRA)

Database: Inspec

Data Provider: Engineering Village

Copyright 2021, The Institution of Engineering and Technology