

CVExplorer: Identifying Candidate Developers by Mining and Exploring Their Open Source Contributions

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Abstract

Open source code contributions contain a large amount of technical skill information about developers, which can help to identify suitable candidates for a particular development job and therefore impact the success of a development team. We develop CVExplorer as a tool to extract, visualize, and explore relevant technical skills data from GitHub, such as languages and libraries used. It allows non-technical users to filter and identify developers according to technical skills demonstrated across all of their open source contributions, in order to support more accurate candidate identification. We demonstrate the usefulness of CVExplorer by using it to recommend candidates for open positions in two companies.

Keywords

Identifying candidate developers, Developer skills identification,
Mining software repositories