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Scientific workflows in data analysis: Bridging expertise across multiple domains

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- We demonstrate the ability to re-use workflow fragments in different data domains: text analysis, image analysis, analysis of activity in video, and neural analysis of artistic style.
- We highlight how the re-use of workflows allows scientists to link across disciplines and avail themselves of the benefits of inter-disciplinary research beyond their normal area of expertise
- Creation of various workflow fragments for text analysis, image analysis, analysis of activity in video, and neural analysis of artistic style.
- Case studies that show the re-usability of workflow fragments across multiple data domains, including computer vision and machine learning applications for multimedia analysis.
- Analysis of development time and effort to both extend a nascent, rudimentary analysis of a multimedia analysis project using the provided workflow fragments and to port its pre-existing code as new workflow fragments as well as creating multiple implementations of the neural algorithm for artistic style.

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