

Functional Programming in the Wild

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We provide an overview of the Aardvark Platform team and current interesting projects. The team works in High Performance Rendering, Data Acquisition and Computer Vision areas together with industry partners, aiming to create clean, production-quality software. Functional Programming and Declarative APIs greatly facilitate this process for small and scientific teams.

Building large, complex, and heavily underspecified research applications with small teams. *Aardvark.Media* is an ELM-style application declaration library. It provides a declarative API, of which an efficient mutable implementation is compiled in the background. We demonstrate some examples implemented with *Aardvark.Rendering* and *Aardvark.Media*, including an efficient Volume Renderer, a large-scale level of detail system used with Point Clouds, and VR apps.