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### Reactive Programming for Kids

Functional Reactive Programming (FRP) is a framework for integrating time flow into the semantics of a programming language. While the underlying language is usually a functional one such as Haskell or Scheme it is possible to add reactivity to any programming language. This talk will describe an implementation of FRP in Python, built on top of the Panda3D game engine. This extends previous FRP work by integrating reactive programming into the O-O framework used by the game engine. I will address the underlying semantic issues and compare this to other reactive programming and modeling systems.

This research supports a summer computer camp for kids aged 13 and up with no prior programming experience. Using this framework, campers are able to build small video games and create interesting 3-D scenes and simulations. This talk will include examples of student work using our system.