Building trustworthy refactoring tools

Simon Thompson

School of Computing, University of Kent,
Canterbury, Kent, CT2 7NF, UK
s.j.thompson@kent.ac.uk

The bar for adoption of refactoring tools is high: not only does a refactoring extract information from your source code, it also transforms it, often in a radical way.

After discussing what users require from their tools, we will examine ways in which tool builders can try to increase their users’ confidence in the tools. These mechanisms include visualisation, unit testing, property-based testing and verification, and are based on the Kent functional programming group’s experience of building the HaRe and Wrangler refactoring systems for Haskell and Erlang.