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Rheinland-Pfälzische Technische Universität Kaiserslautern Landau

# Liquid Haskell

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*This report gives a brief overview of Liquid Haskell, a tool that extends Haskell with refinement types. Refinement types are types that extends expressiveness of Haskell types systems by providing predicates that can verify invarients of the program. This report explains briefly how SMT solvers leveraged by Liquid Haskell and how to use Liquid Haskell by providing some examples. Finally, we discuss the limitations of Liquid Haskell and compare it with other tools.*

## References

[1] Ranjit Jhala & Niki Vazou (2021): *Refinement Types: A Tutorial*. *Foundations and Trends® in Programming Languages* 6(3–4), pp. 159–317, doi:10.1561/2500000032. Available at `http://dx.doi.org/10.1561/2500000032`.