BAB II

STUDI LITERATUR

II.1 Metode Formal

- Apa itu metode formal (Definisi, Penemu, Filosofi)
- Kenapa metode formal
- Software Engineering jauh lebih tidak reliable dari other engineering
- Kenapa metode formal jarang dipake
- Contoh metode formal yang sudah dipake

II.1.1 Justifikasi Logis

- Aturan Logis
- Logika Propositional
- Logika Predikat
- SAT and SMT Solver

II.1.2 Spesifikasi Program

II.1.3 Verifikasi Program

II.2 Pemrograman Fungsional

- Paradigma Pemrograman
- Paradigma Pemrograman Fungsional (Sabry, 1998)
- Paradigram Pemrograman Fungsional Murni
- Kenapa Fungsional Murni itu excellent buat Metode Formal (Turner, 1985)
- Perbandingan dengan Paradigma lain

II.2.1 Haskell

- Definisi, Penemu, Filosofi
- Fungsional Murni
- Lazy Computing
- Hard Typing
- Program yang dibuat menggunakan Haskell (Hackage)
- How to Specify and Verify (Haskell for Specification)
- Konkurensi dalam Haskell

II.2.2 Liquid Haskell (Peña, 2017)

- Definisi, Penemu, Filosofi
- Liquid for verifying haskell
- Usage of SMT Solver in Liquid Haskell
- Refinement, Inference, and Polymorphism
- Liquid haskell Case Studies

DAFTAR PUSTAKA

Peña, R. (2017). An introduction to liquid Haskell. *Electronic Proceedings in Theoretical Computer Science, EPTCS*, *237*, 68–80. https://doi.org/10.4204/EPTCS.237.5

Sabry, A. (1998). What is a purely functional language? *Journal of Functional Programming*, *8*(1), 1–22. https://doi.org/10.1017/S0956796897002943

Turner, D. A. (1985). Miranda: A non-strict functional language with polymorphic types. *Lecture Notes in Computer Science (Including Subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*, *201 LNCS*, 1–16. https://doi.org/10.1007/3-540-15975-4_26