WOSS’04 Papers Classified

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Classification Scheme

• Dimensions
  – Y: System layer/abstraction
  – X: Support for dynamic adaption
    • Monitoring/sensing
    • Diagnosis/interpretation
    • Selection/reasoning
    • Effecting/acting

• Other possible dimensions
  – Self-* properties
  – Degree of “self”ness
  – Techniques applied
  – …many more…

• Workshop Affinity Groups
  – Architecture-based Adaptation
  – Distributed Systems
  – System-level adaptations
  – Techniques
  – Everyday Systems
  – Patterns
  – Reasoning
Papers

- Georgas/Taylor
  - {architecture-level, KB + expert sys}
- Gobel
  - {component-level, encapsulate + QoS matching}
- Hawthorne/Perry
  - {all levels, automate req eng?}
- Abdelwahed/N.K./S.N.
  - {distributed sys, control-based}
- Arshad/D.H./A.W.
  - {distributed sys, planning-based}
- Fox/E.K./D.P.
  - {application level, micro-reboots + SLT}
- Heisig/Moyle
  - {any level (resources?), decision-tree}
- Joshi et. al.
  - {application level, states/model & MDP decision}
- Kumar et. al.
  - {instruction-level, fast-breakpoint}
- Ring/D.E./E.C.
  - {kernel/OS, loadable module to detect rootkit}
- Bisbal/Cheng
  - {middleware, RAFTING (feature interaction)}
- Audsley/Baker
  - {any level, express prefs + decision analysis}
- Egyed
  - {architecture-level, arch differencing}
- Garlan et. al.
  - {task-level, adapt to user needs}
- Hallsteinsen/E.S./J.F.
  - {mobile app middleware, FAMOUS middleware}
- Tichy/D.S./H.G.
  - {component-level, fault-tolerant pattern}
- Wile
  - {coarse-grained sys, self-mgmt style/patterns}
- Balasubramaniam et.al.
  - {architecture-level, pi-calc env’t to decompose / evolve / recompose sys}
- Bradbury et. al.
  - Survey: dynamic architectures in formal spec, mostly static analysis and “offline”
- Desmet et. al.
  - {component/service-level, DiPS+ open arch able to support preserving correctness}
- Dowling/Cahill
  - {distributed sys + component-level, MDP/reinforcement learning}
- Malek/M.M./N.M.
  - {distributed sys, framework + tool support & maximize objective function}
- Narain
  - {component-level, requirement language + solver to generate configuration}