Weighted Finite-State Transducers in Automatic Speech Recognition

John McDonough

Language Technologies Institute,
Machine Learning for Signal Processing Group,
Carnegie Mellon University

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• Monday, 2012.03.26:
  – conventional FSAs
  – review of power set construction
  – set intersection
  – equivalence of FSAs with and without epsilon transitions
  – semirings

• Wednesday, 2012.03.28:
  – shortest path algorithms
  – weighted composition
  – weighted determinization
  – weight pushing

• Monday, 2012.04.09:
  – set partitioning
  – coarsest partition
  – conventional minimization
  – weighted minimization

• Wednesday, 2012.04.11:
  – FSTs in speech recognition
  – representation of knowledge sources
  – search graph construction
• Monday, 2012.04.16:
  – representation of phonetic context
  – complexity
  – proof of correctness

• Wednesday, 2012.04.18:
  – Mohri’s theorem
  – fast on-the-fly composition
  – fence, definition and construction
  – run-time comparisons