Modern Machine Learning Conniptions for Automatic Speech Recognition

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Abstract : This expose presents a luculent of recent machine learning practices as employed in the modern and as pertinent to prospective automatic speech recognition schemes. The aspiration is to promote additional traverse ablution among the machine learning and automatic speech recognition factions that have transpired in the precedent. The manuscript is structured according to the chief machine learning archetypes that are furthermore trendy by now or have latency for building momentous hand-outs to automatic speech recognition expertise. The standards offered and convoluted in this article embraces adaptive and multi-task learning, active learning, Bayesian learning, discriminative learning, generative learning, supervised and unsupervised learning. These learning archetypes are aggravated and conferred in the perspective of automatic speech recognition tools and functions. This manuscript bequeaths and surveys topical advances of deep learning and learning with sparse depictions; further limelight is on their incessant significance in the evolution of automatic speech recognition.

Keywords : automatic speech recognition, deep learning methods, machine learning archetypes, Bayesian learning, supervised and unsupervised learning

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