Brief History of SLMs

- **1998~2010**: **Progress made** on using **language models for IR** and for **text analysis/mining**
  - Success of LMs in speech recognition inspired more research in using LMs for IR
  - Language model-based retrieval models are at least as competitive as vector space models with more guidance on parameter optimization
  - Topic language model (PLSA & LDA) proposed and extensively studied
- **2010~ present**: **Neural language models emerging** and **attracting much attention**
  - Addressing the data sparsity challenge in "traditional" language model
  - Representation learning (word embedding)