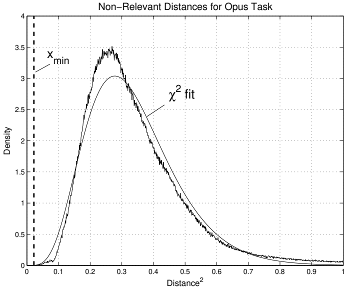
Retrieval

Approximate search for *sequences* of feature vectors.

Scalability:

- locality-sensitive hashing;
- feature-space modelling:

$$x_{\min} = \frac{2M\sigma^2}{d}\left(\frac{d\Gamma(\frac{d}{2})(-\ln(1-f))}{2N}\right)^{\frac{2}{d}}$$



Resources

Current resources:

- Goldsmiths deployment: 52,000 tracks in database:
  - features for each audio file;
  - metadata;
  - infrastructure bits and pieces.
- “technology preview release”:
  - $O(N)$ search;
  - `http://omras2.doc.gold.ac.uk/software/audiodb/`
  - `http://omras2.doc.gold.ac.uk/audiodb/`
  - $O(N^{\frac{1}{c^2}})$ LSH release early in New Year.
- Forthcoming publications:
  - Slaney & Casey, IEEE Sig. Proc. (LSH tutorial);
  - Casey, Rhodes & Slaney, IEEE TASLP (distance analysis).