LaNe Plot: A Visual Fingerprinting Technique For Sequential Data

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**Technique**
For each data point in a sequence, visualize the difference between the Last and Next data point.

**Example: Wikipedia revisions**

Dataset: Revision histories of Wikipedia articles
Finding:
- Immediate reversions → Diagonal pattern
- Additions/removals from tables → Cross pattern

Revision sequence

**Usage Scenarios**

- **< 100 data points**
- **> 3000 data points**
- **> 4000 data points**

**Diagonal pattern:** Immediately reverted edits

**Cross pattern:** At (300, -300); Presence of a heavily edited list

**Line chart**
- Shows spikes in values
- Shows overall increasing trend
- Not scalable to large sequences

**LaNe plot**
- Summarizes fluctuations in the sequence
- Space efficient
- Scalable to large sequential data

**Future Work**
- What other datasets make sense for the LaNe plot?
- What other visualization techniques can the LaNe plot complement?
- How to evaluate the effectiveness of the LaNe plot?

Want to know more? Email me at harith@cs.au.dk

Fingerprinting large sequential data is challenging. When limited screen space is a constraint, the LaNe plot reveals patterns that compliment conventional techniques.