

# View Reviews

Paper ID	134
Paper Title	A Probabilistic Semi-Supervised Approach with Triplet Markov Chains
Track Name	MLSP2023 - Regular Papers

## Reviewer #1

### Questions

**1. Criterion 1: Relevance to Conference Call and to which Degree the Paper is a Timely Contribution**

Excellent

**2. Criterion 2: Scientific/Technical Originality and Potential Impact**

Very good

**3. Criterion 3: Scientific/Technical Content and Advances Beyond the State-of-the-Art**

Very good

**4. Criterion 4: Quality and Clarity of the Presentation**

Excellent

**5. Criterion 5: Comments for the Authors**

The paper presents a general framework to train parameterized triplet Markov chain models for sequential Bayesian classification in a semi-supervised context. It is in general well-written and the proposed methods works well compared with two baseline methods.

In the conclusion, the authors state that the proposed approach achieved state-of-the-art performance on image segmentation. While the results look good, this is arguable, as the paper compared with two baselines in the same family only, while there are numerous works in image segmentation.

In sub-section 3.2.2, it would be good to refer to Ref [5].

## Reviewer #2

### Questions

**1. Criterion 1: Relevance to Conference Call and to which Degree the Paper is a Timely Contribution**

Very good

**2. Criterion 2: Scientific/Technical Originality and Potential Impact**

Good

**3. Criterion 3: Scientific/Technical Content and Advances Beyond the State-of-the-Art**

Good

**4. Criterion 4: Quality and Clarity of the Presentation**

Very good

**5. Criterion 5: Comments for the Authors**

The paper introduces a variational approach to train triplet Markov chains. The problem is interesting and clearly described. The approach is well detailed and the math appears to be sound. Some experiments on toy datasets are also shown with interesting performance.

Overall it is a very interesting paper with a bit more of a theoretical flavor.

