

Modeling Clinical Time Series Using Gaussian Process Sequences

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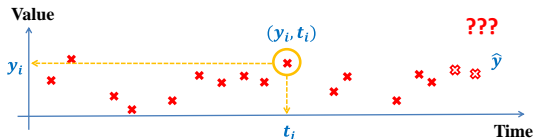
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April 24, 2013

Problem & Solution

Problem

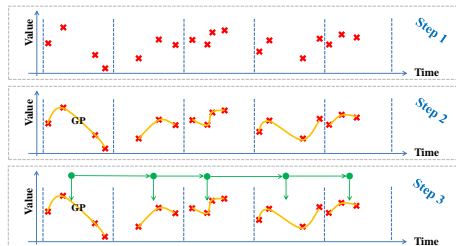


Goal

- 1 Deal with missing values
- 2 Handle irregular time sampling
- 3 Long term predictions

Solution

State Space Gaussian Process (SSGP)



Evaluation Study

- Test on clinical data - complete blood counts (CBC) on 1000 patients.
- Compared to multiple baselines by predicting future lab values.
- Performance measured using the Root Mean Square Error(RMSE).
- Results show our approach outperforms the baseline.

