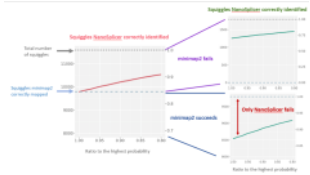
# Result

Wednesday, February 17, 2021 10:29 PM

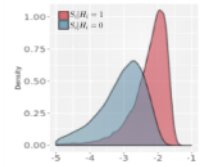
Part. 1 Check whether or not squiggle has information to distinguishing close splice site.

- NanoSplicer accuracy (96%)
  - TestDTW setup
    - Different distance function
    - DTW band
    - Don't allow warping in junction squiggle
    - Minimum dwell time
    - Laplace vs normal
  - Ratio to the highest probability

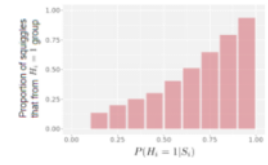


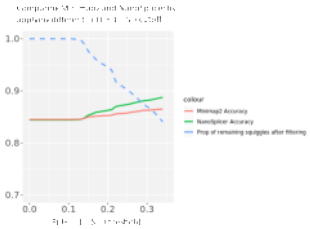
No minimap2 acc here

- H_0 and H_1 simulation
  - S_i empirical distribution

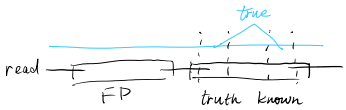


  - S_i validation





Part. 2 Sequins analysis using real data analysis pipeline (do not use transcript annotation except for the performance assessment)




- Accuracy (for truth known JWRs and No S_i filtering)

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minimap accuracy: 97.2287%
NanoSplicer accuracy: 95.9815%
proportion of junction within read identified by both softeware: 94.4238%
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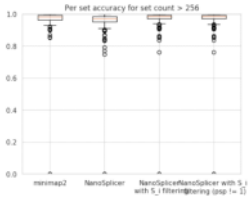
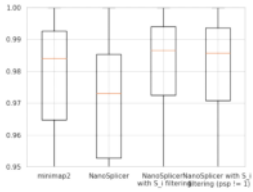
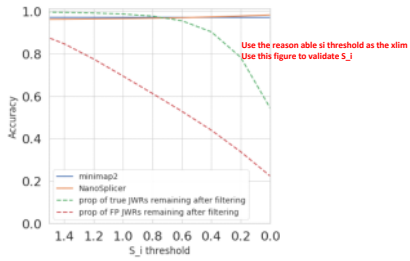
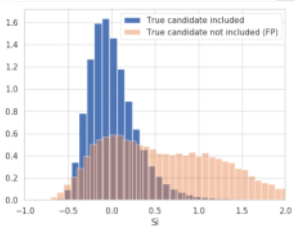
- Per junction accuracy for JWR set with enough counts



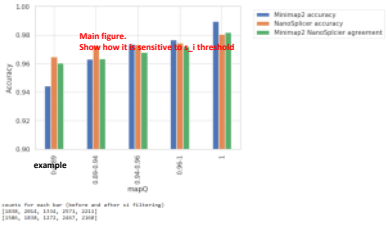




- Using S_i to identify false positives

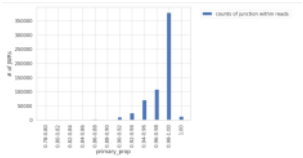



- Junction mapping quality




- Primary site proportion analysis

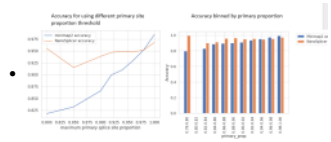



  - Accuracy of NanoSplicer and Minimap2

Part.3 Real data analysis

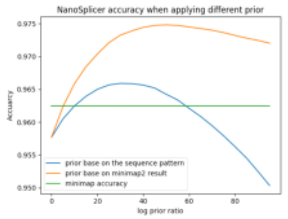
Overall accuracy (update needed)

- All the analysis will follow the way we did in part2



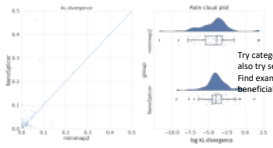
Extra thing:

Prior




Quantification

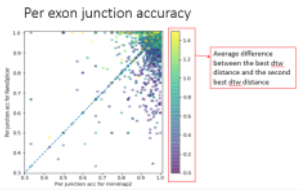
- Different way of measure the divergence



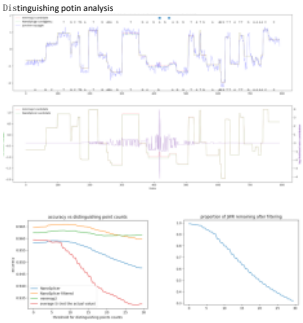
Try categorize by mapQ, also try seq prior.
Find example where its beneficial

Other analysis

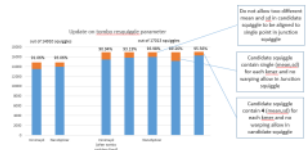
- Probability ratio



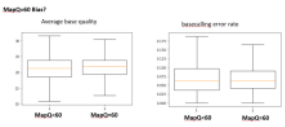

- Distinguishing potin analysis

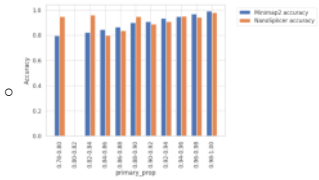


- Different DTW setting



- Sequins reads subsample bias analysis




Minimap2 accuracy
Nanosplicer accuracy
Accuracy
primary_prop