Roman Numeral Analysis with Graph Neural Networks: Onset-wise Predictions from Note-wise Features

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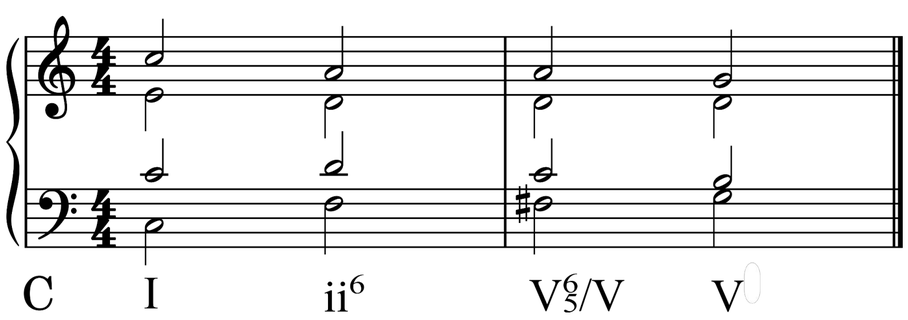
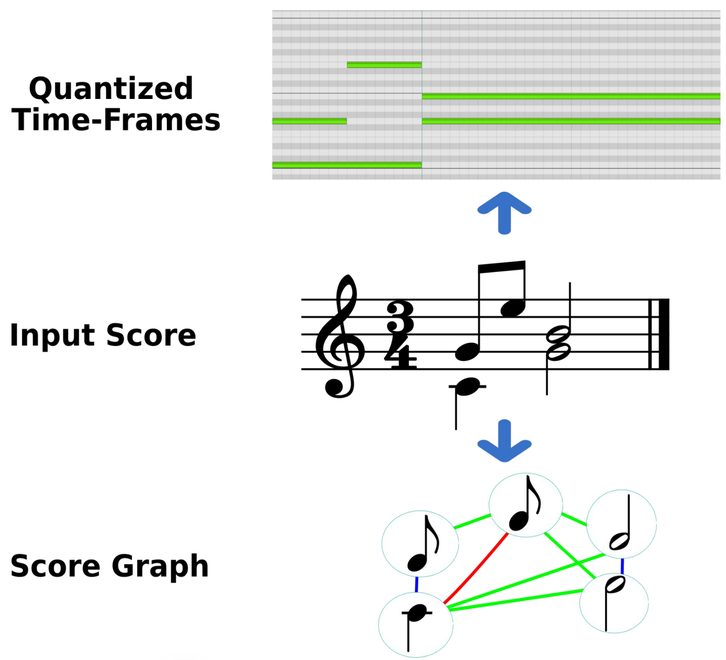
Roman Numeral Analysis

The process of identifying chords and their functional context in pieces of tonal music.



Representations



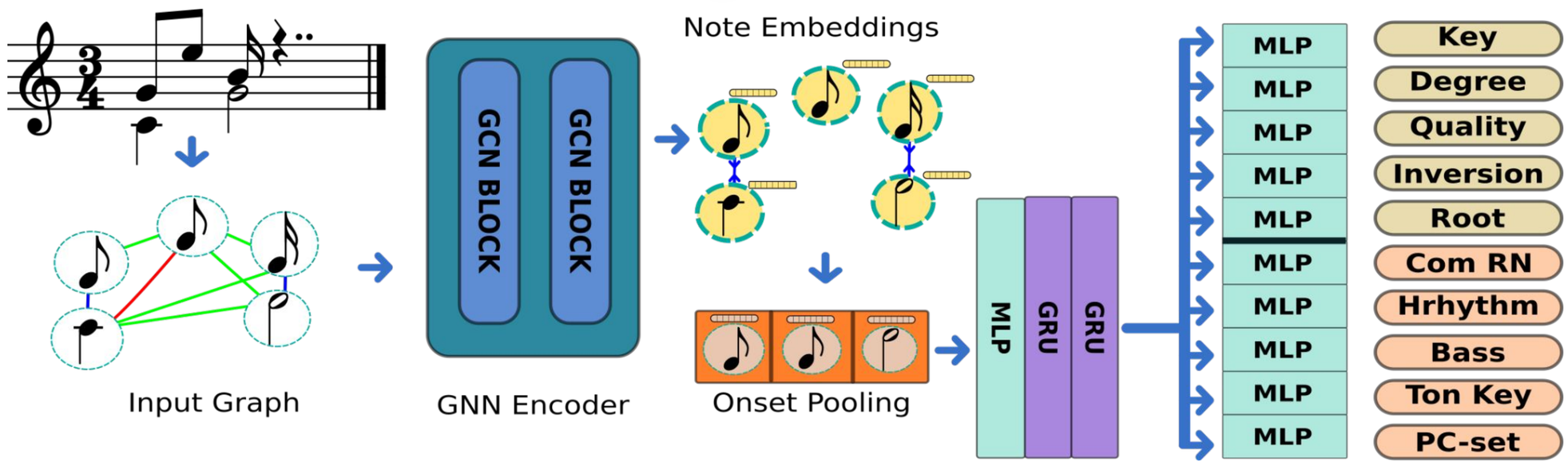
Problem Formulation

A Roman Numeral can be represented by 5 fields:

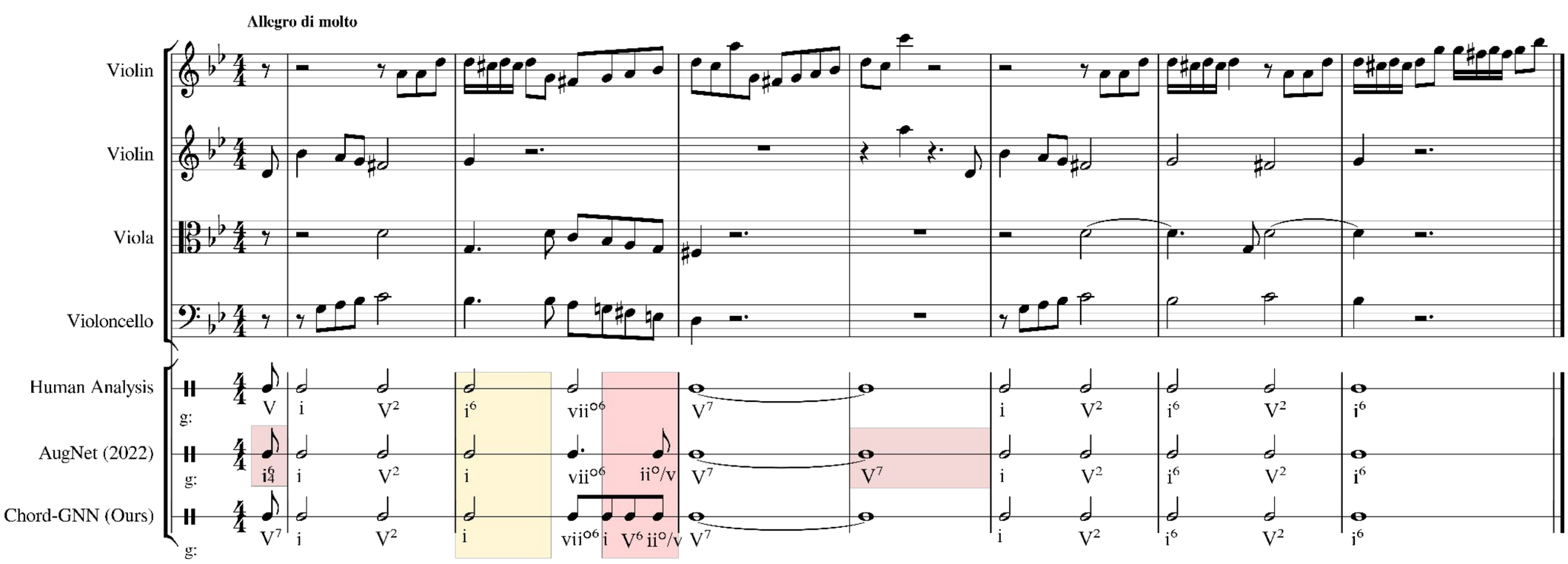
- Local Key (38 classes)
- Degree - Primary & Secondary (22 & 22 classes)
- Quality (11 classes)
- Inversion (4 classes)
- Root (35 classes)

Multi-Task Classification Scenario.

ChordGNN



Evaluation



Comparison between the human annotation, AugmentedNet, and ChordGNN on a passage of Haydn's string quartet op.20 No.3 movement 4.

Read Our Paper:

https://tinyurl.com/ChordGNN

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