

Detecting Pitch Tipping with Computer Vision



Pitch Tipping

- Pitchers required to come to 'set' position before a pitch
- Sometimes set up slightly differently for different pitch types

FASTBALL



CURVEBALL



Goal



FASTBALL

CURVEBALL

SLIDER

CHANGEUP

Data Collection

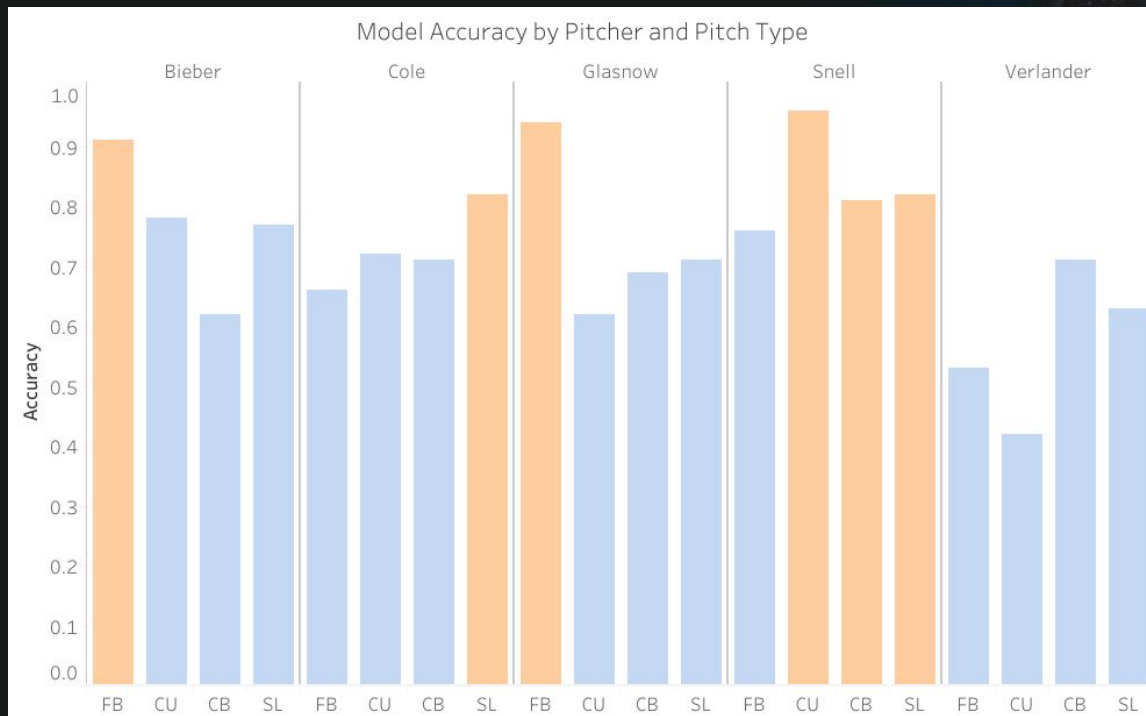


Modeling

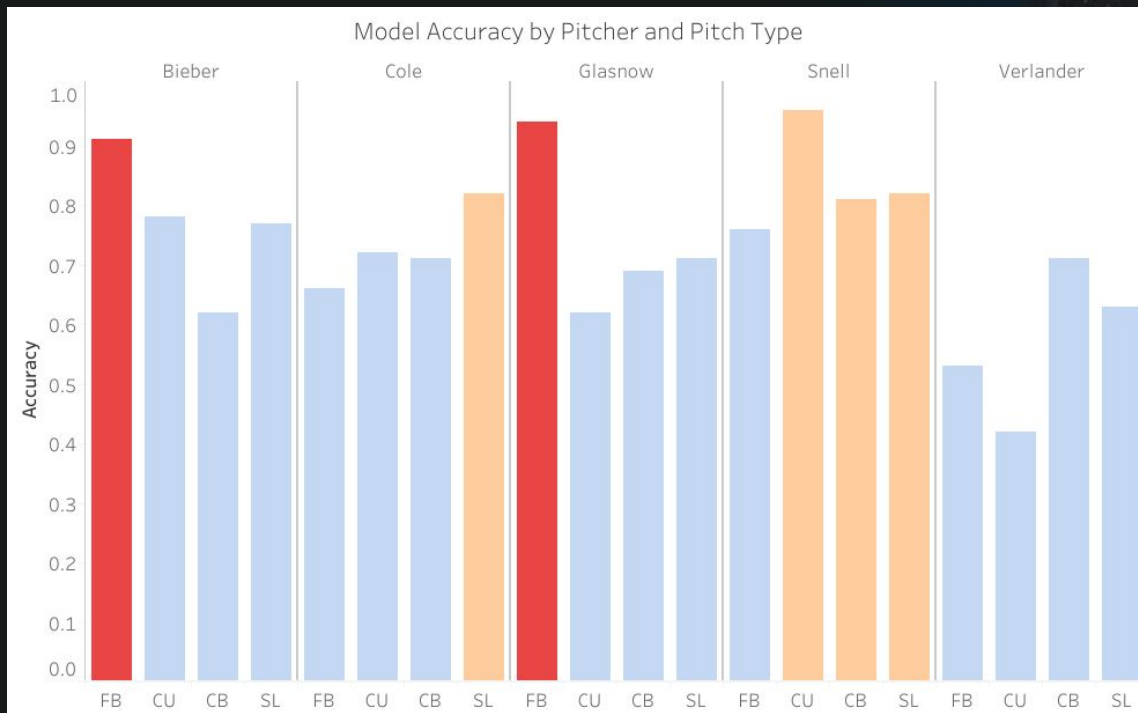
- Transfer learning with VGG16
- Image augmentation
- Five pitchers with large samples and interesting repertoires
- Trained different binary model for each pitcher-pitch type



Most pitchers tip pitches...



...but can humans see it?



Scouting Use Case

FASTBALL




NON-FASTBALL



Thank you!

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OpenCV



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