

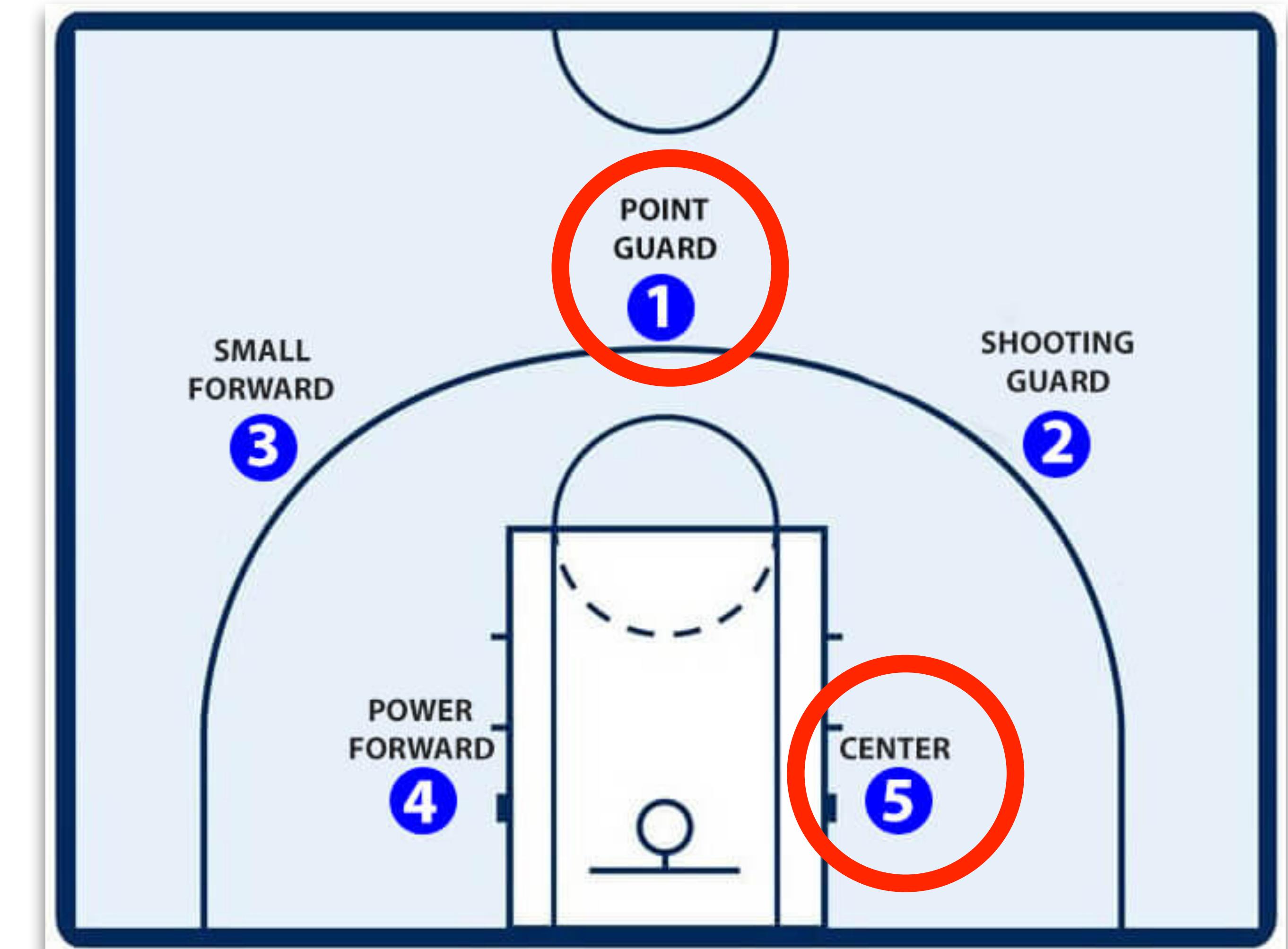


POSITION ANALYSIS: WOMEN'S COLLEGE BASKETBALL

D'FRANTZ SMART



Old School-Position Lock





Sabrina Ionescu

Led team in Points

Led team in Assists

Led team in Steals

2nd on team in Rebounds

2nd on team in Blocks

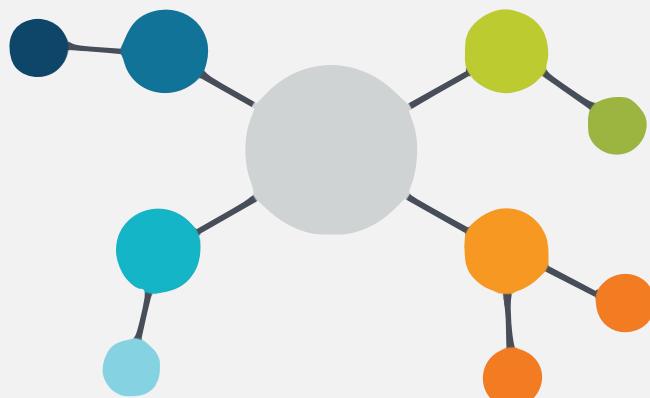


Positions are **dynamic**.

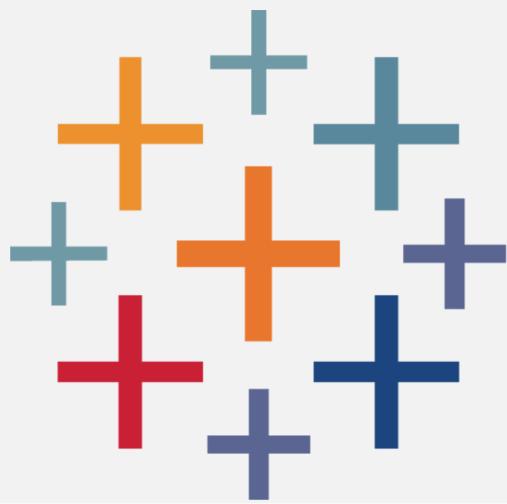
Process



BeautifulSoup to scrape 12,000 NCAA players stats from 2017-2019



KMeans Clustering to find optimal number of positions



Principal Component Analysis and Tableau for interpretation and visualization



Analysis: Explore how these positions impact team performance

I3 Positions

I3 Positions

Low Positions

Low Impact Player

No Impact Player

Paint Touches

I3 Positions

Low Positions

Low Impact Player

No Impact Player

Paint Touches

Mid Positions

In and Out with Efficiency

Reserves

Keep It Solid-Role Player

Off the Glass

I3 Positions

Low Positions

Low Impact Player

No Impact Player

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Elite Positions

I Can Do It All (Perfect 2-Way Player)

Offensive Threat (Get Buckets)

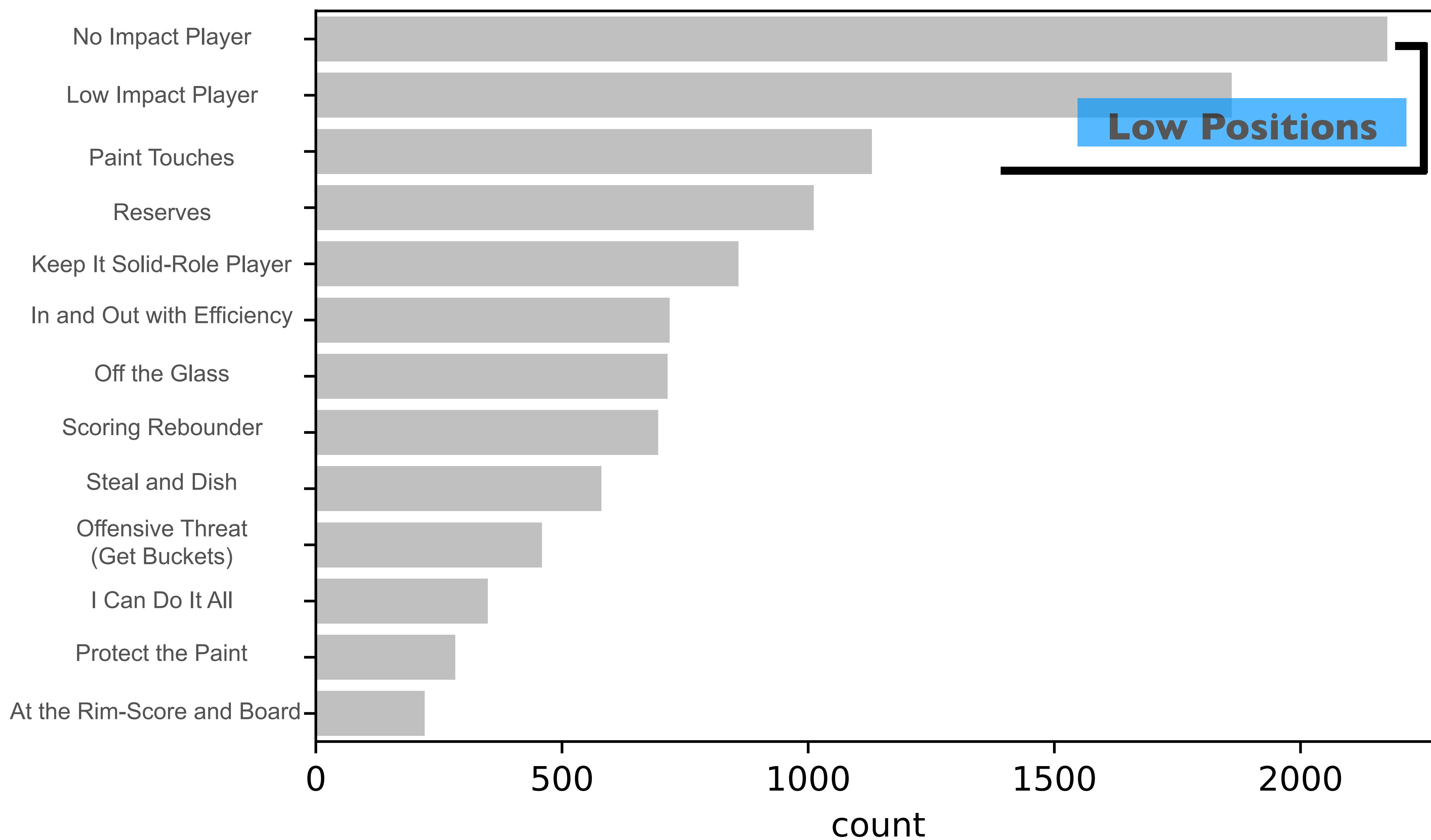
At the Rim-Score and Board

Protect the Paint

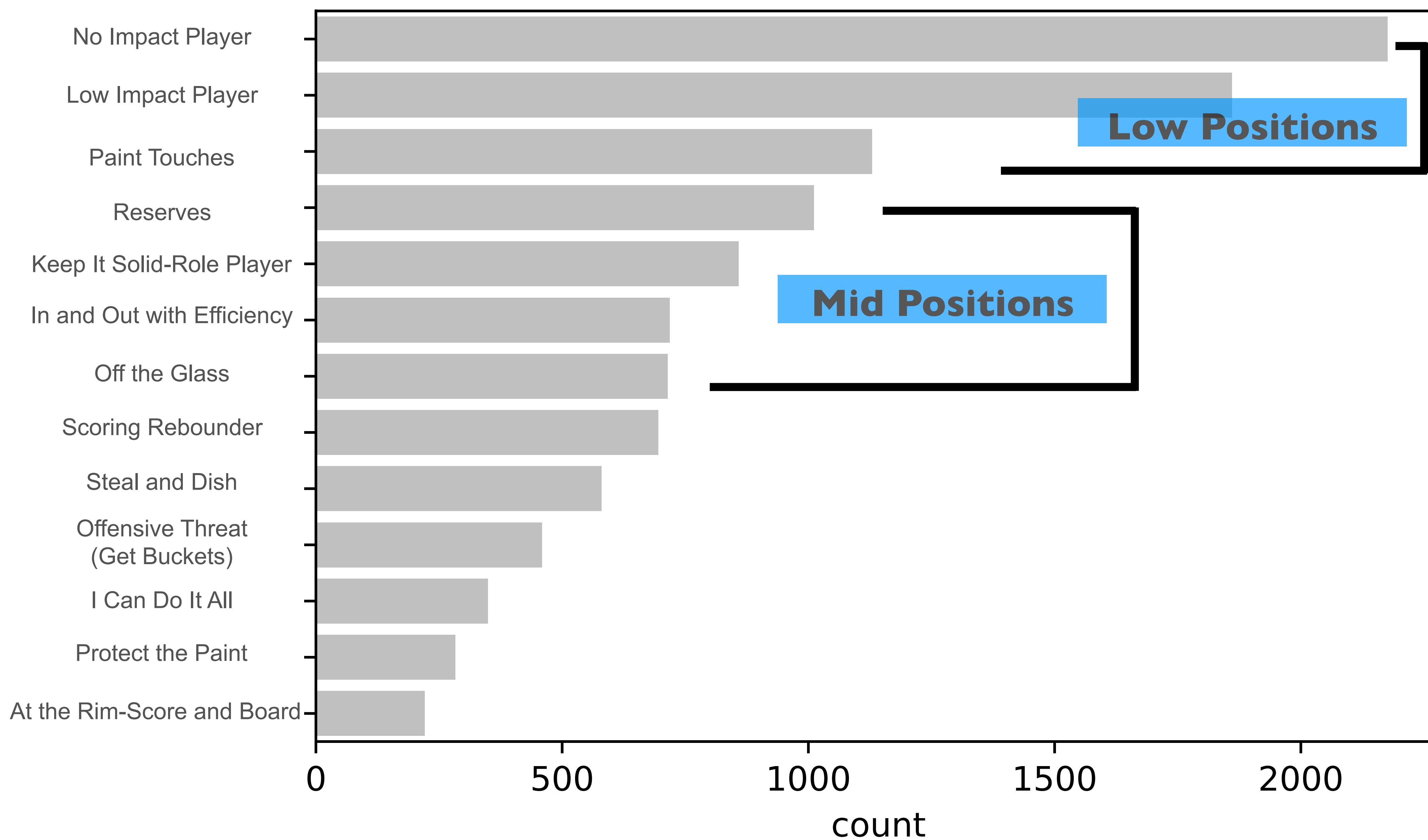
Steal and Dish

Scoring Rebounder

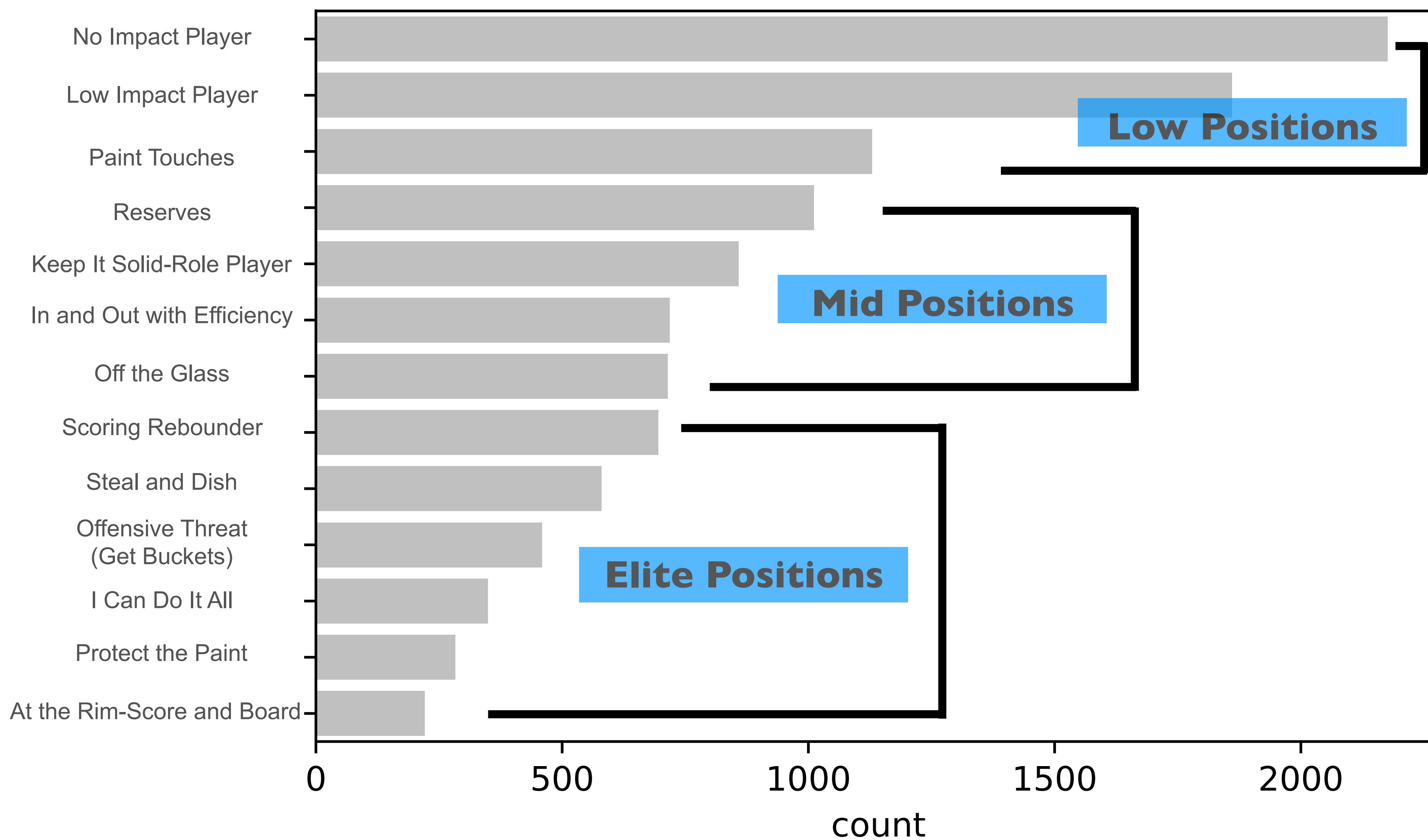
Position Distribution



Position Distribution



Position Distribution

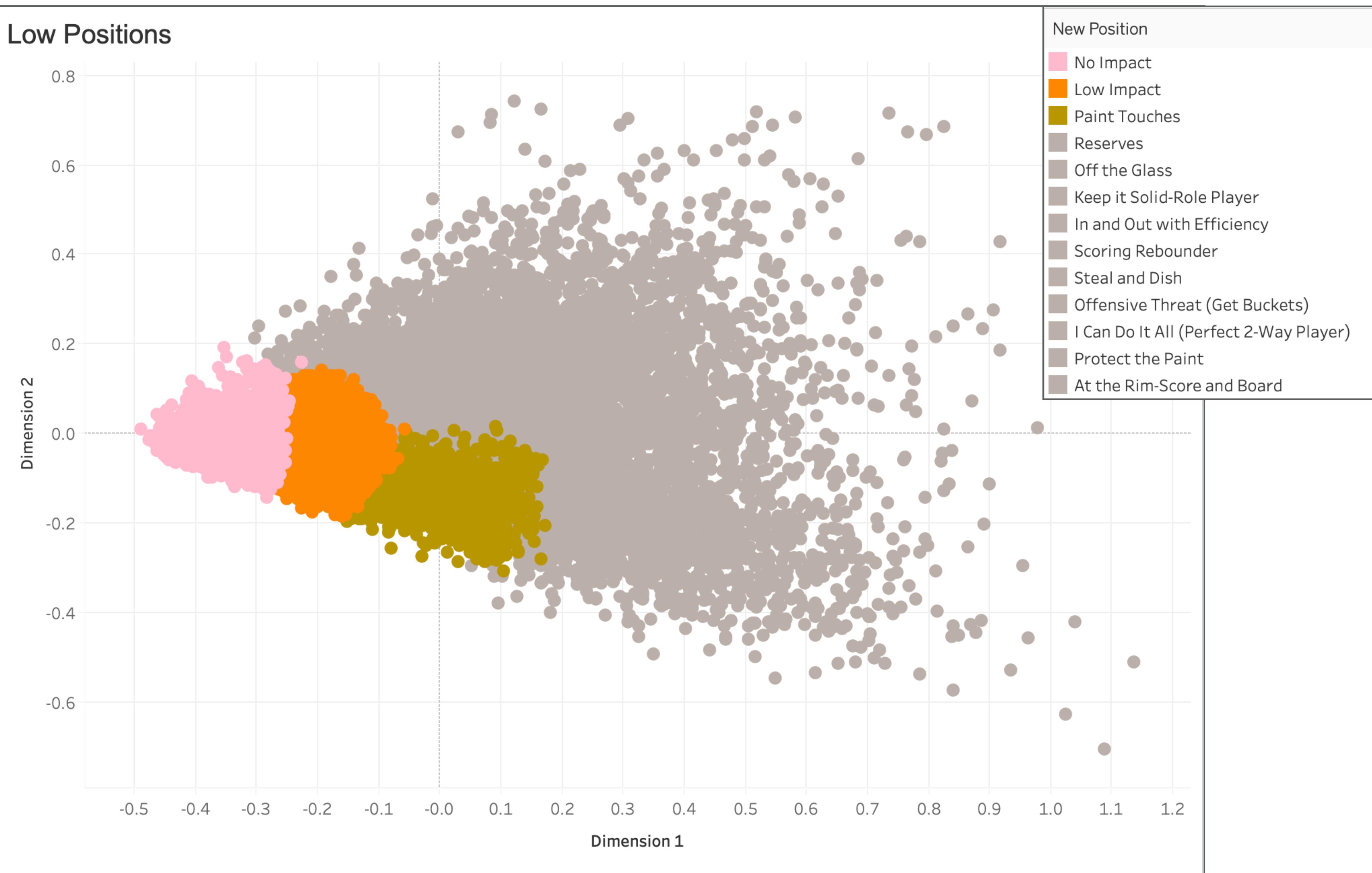


Women's College Basketball Classification

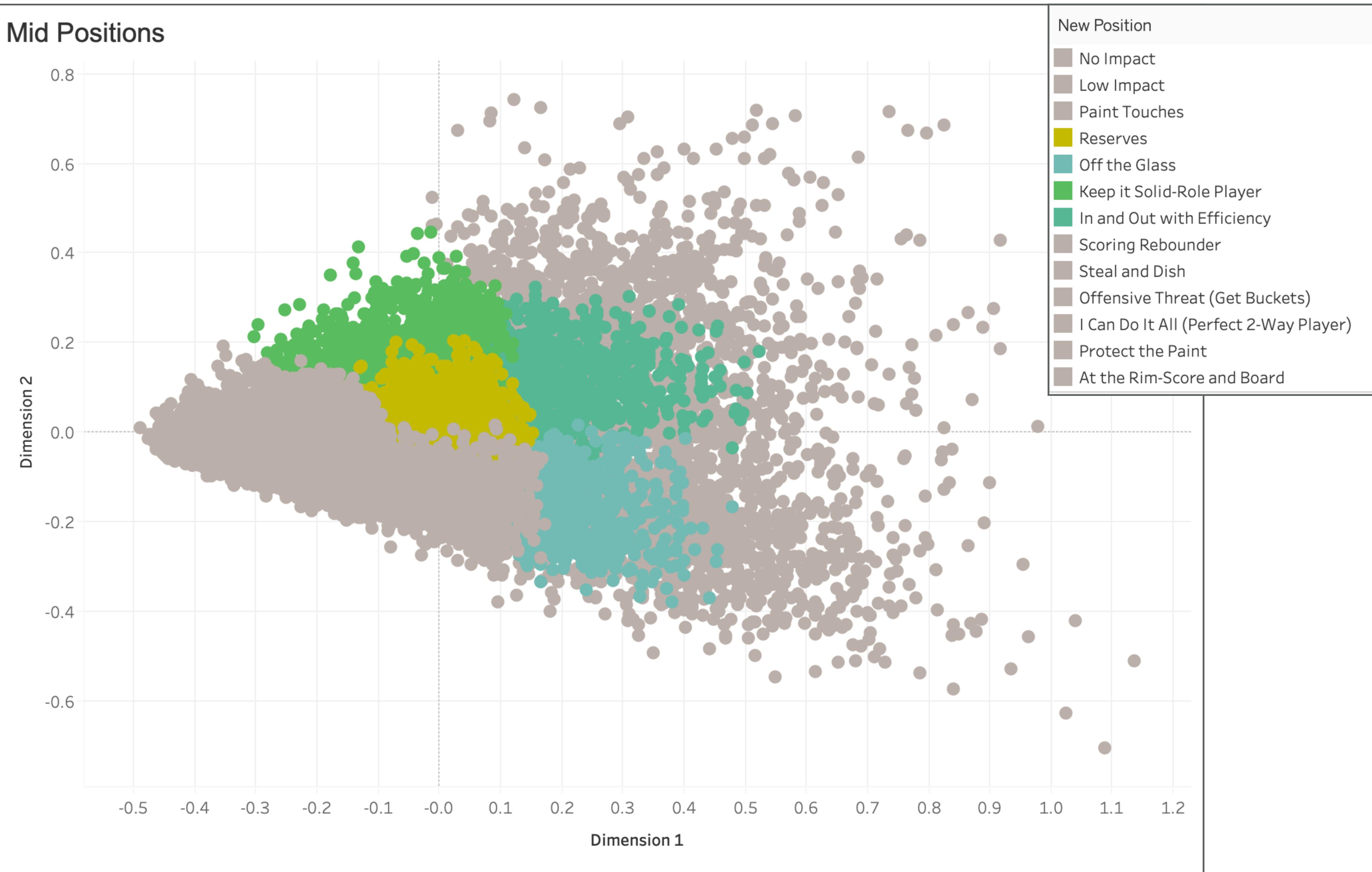
- New Position
- No Impact
 - Low Impact
 - Paint Touches
 - Reserves
 - Off the Glass
 - Keep it Solid-Role Player
 - In and Out with Efficiency
 - Scoring Rebounder
 - Steal and Dish
 - Offensive Threat (Get Buckets)
 - I Can Do It All (Perfect 2-Way Player)
 - Protect the Paint
 - At the Rim-Score and Board



Low Positions



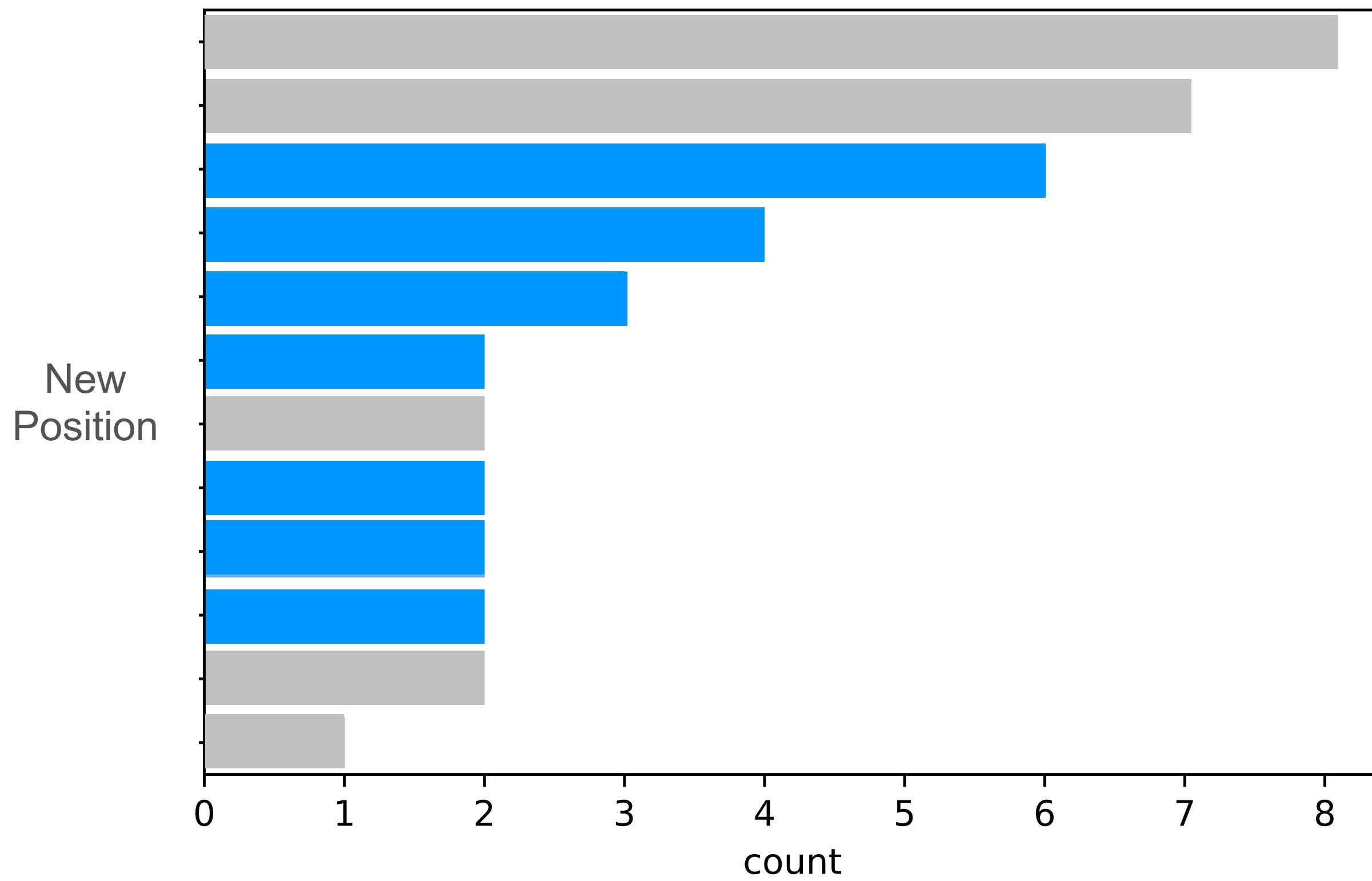
Mid Positions



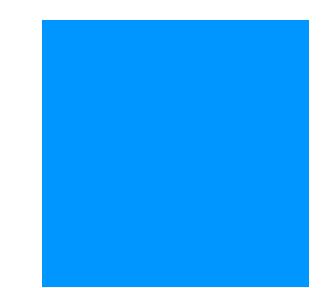
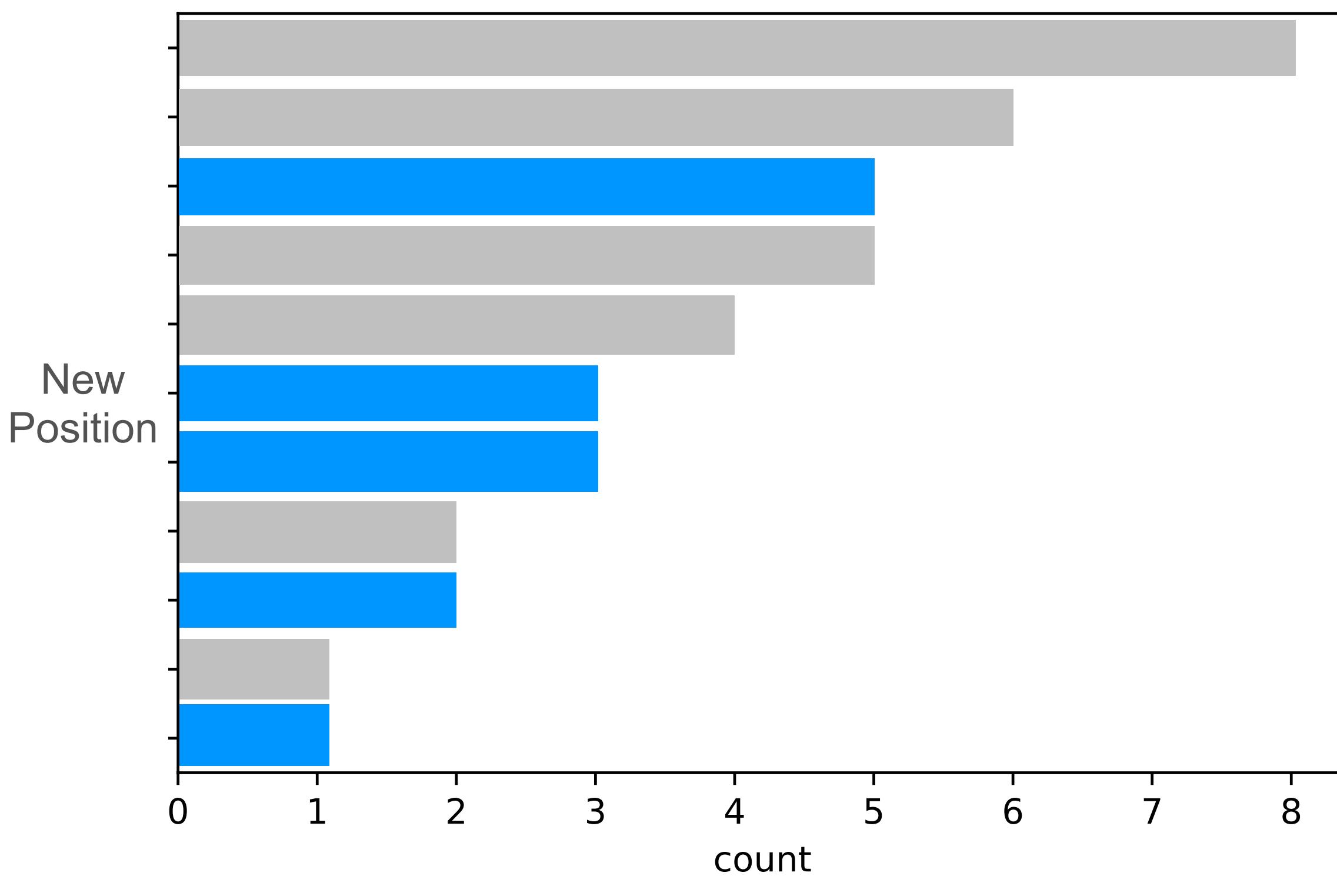
Elite Positions



Top Four of ACC

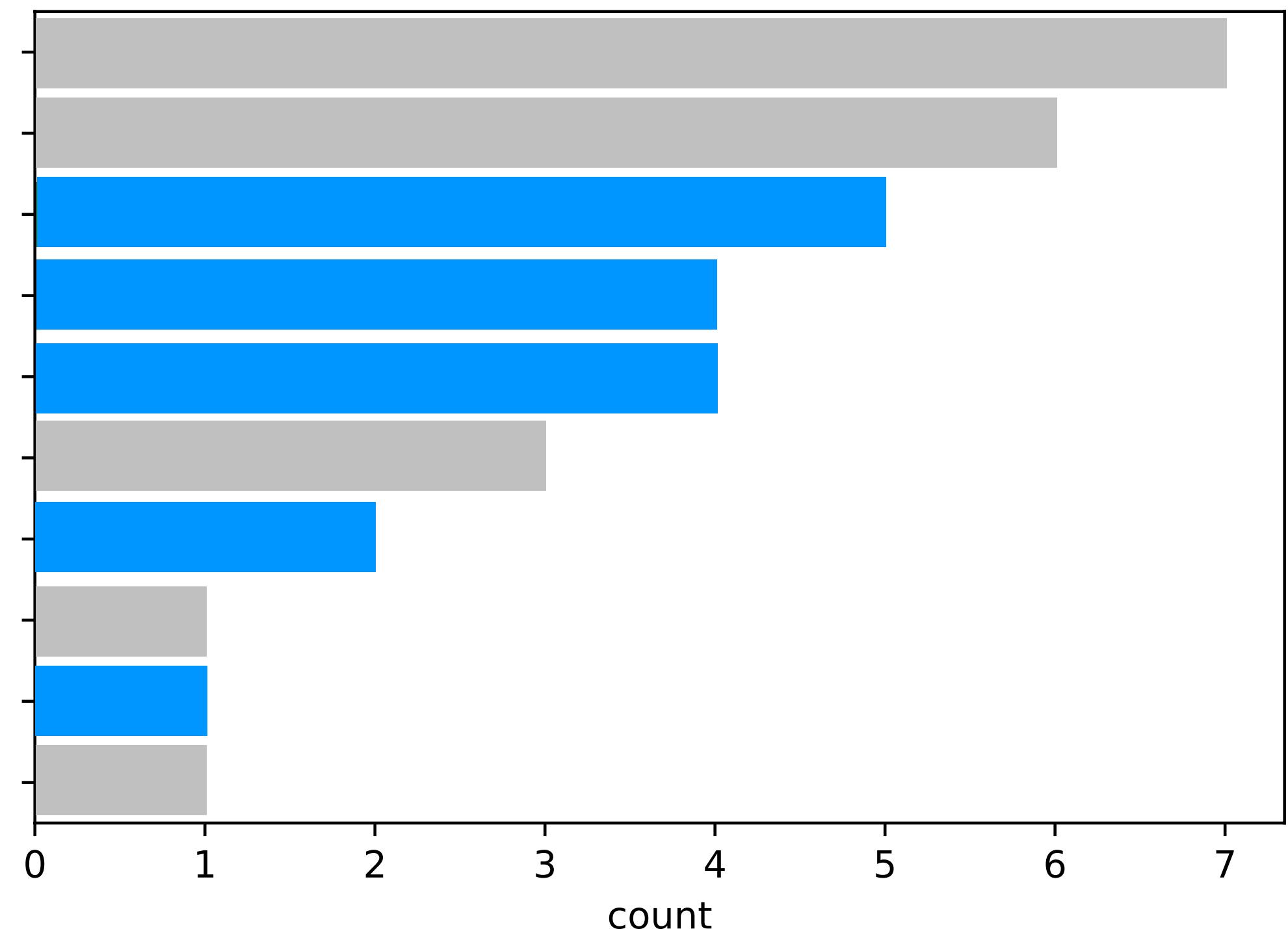


Bottom Four of ACC

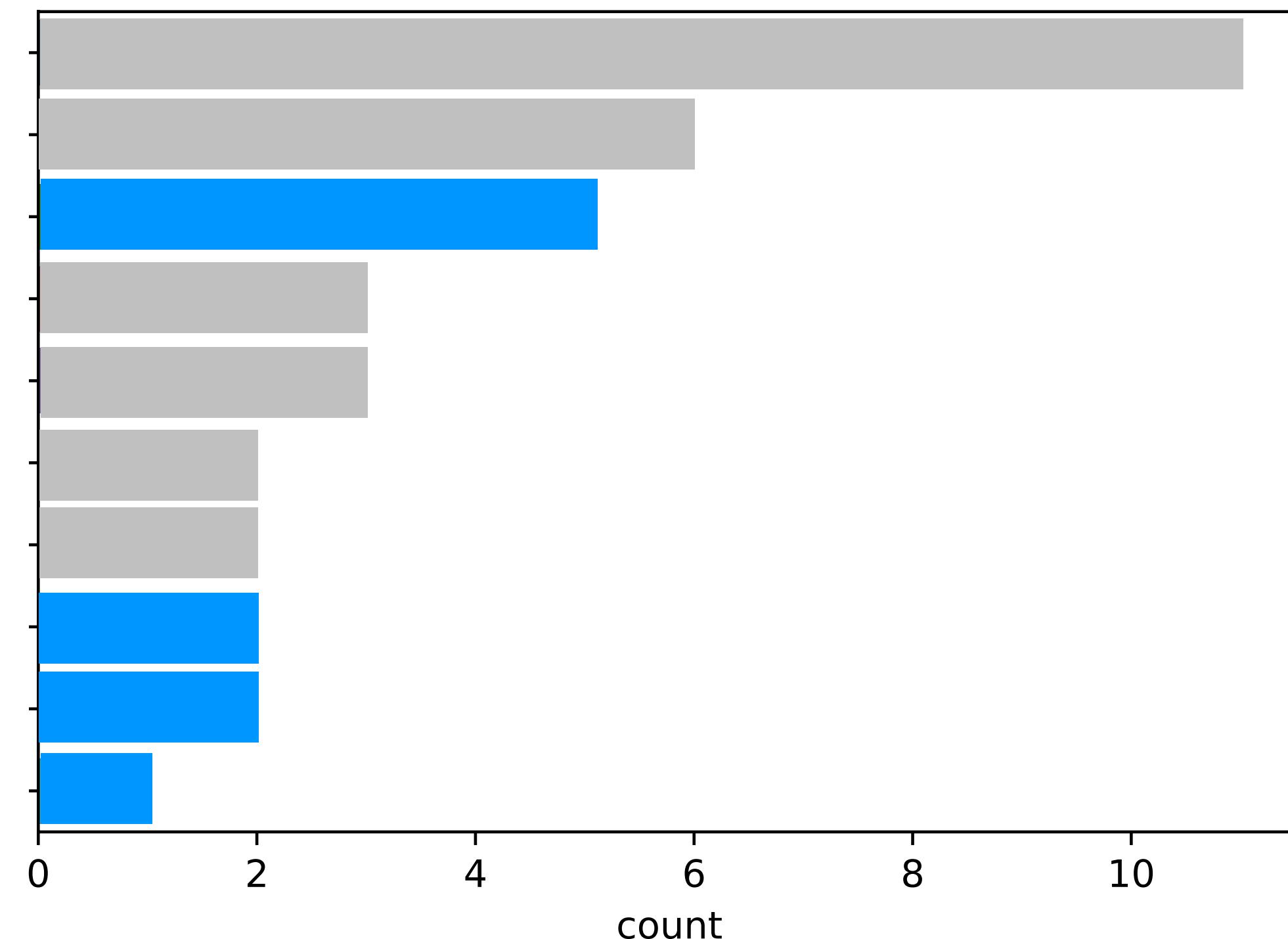


Elite Positions

Louisville: NCAA Team



Tulsa: Non-NCAA Team



Elite Positions

Summary

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I Can Do It All (Perfect 2-Way Player)

Business Applications



Marketing Customer Segmentation



Insurance and Healthcare Fraud Detection

THANK YOU



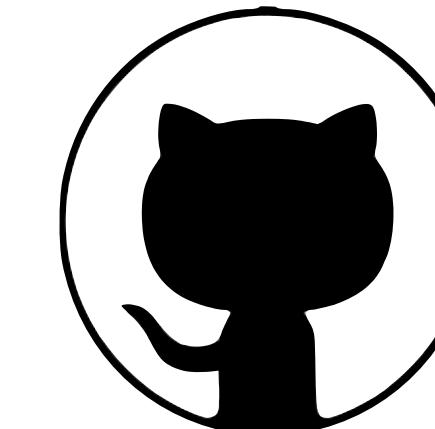
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