



Detecting Cheaters in Call of Duty

By Nina Vergara

Data Acquisition

- Player handles were pulled from public Leaderboards
- Recent match statistics were pulled for each player
- Total number of records: 60,000

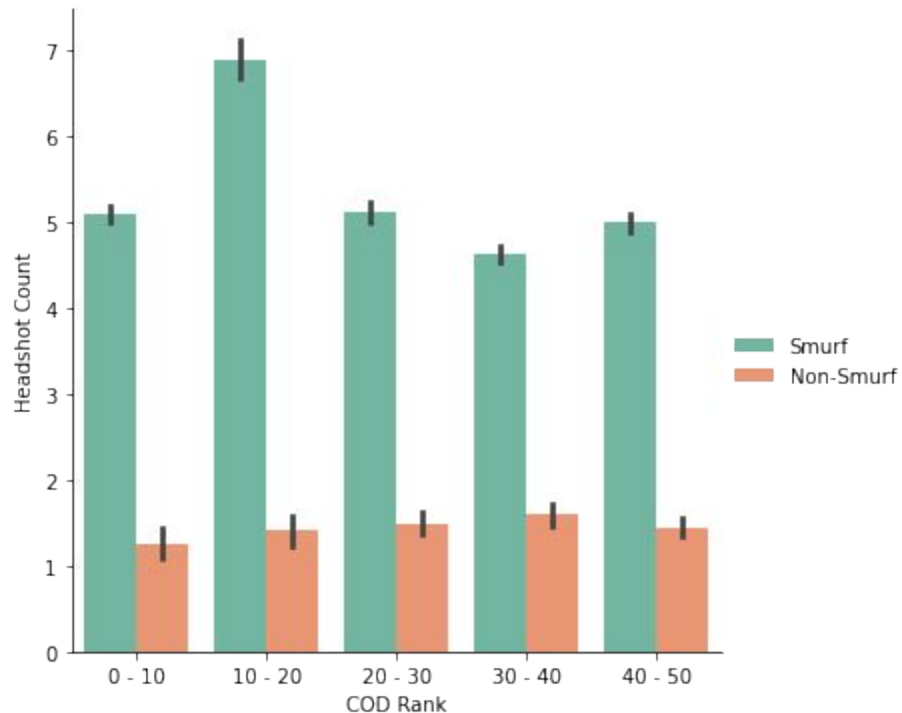


Smurf detection: Play Level vs Account Level

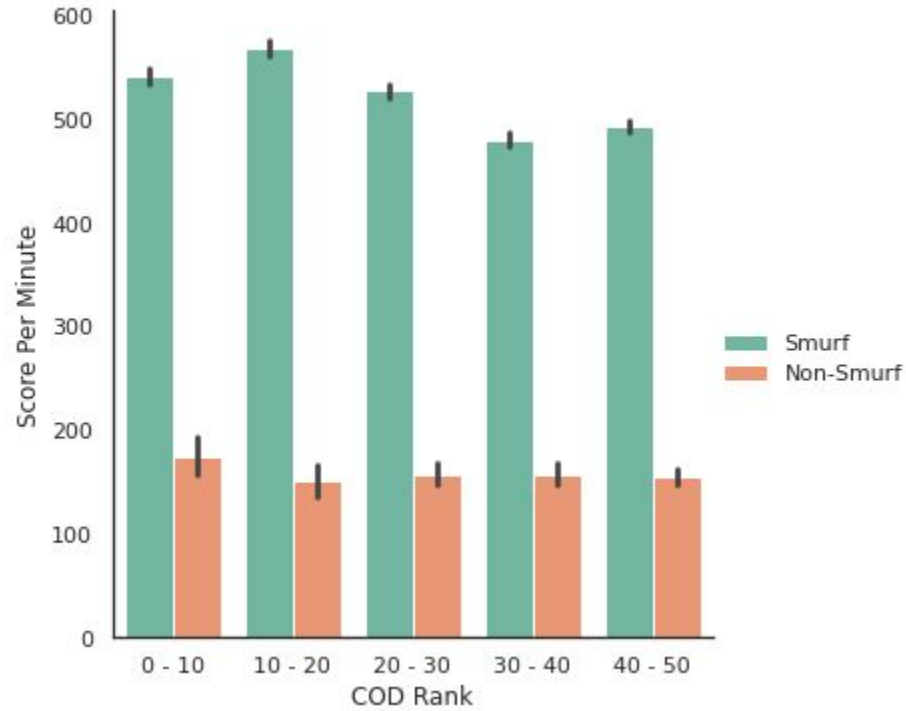
- Play level
 - Characteristics taken from COD's Skill Based Match Making System
 - Labeled assigned by player percentile
- Smurfs were individuals with
 - Top 25th percentile in skill score
 - COD rank below 55



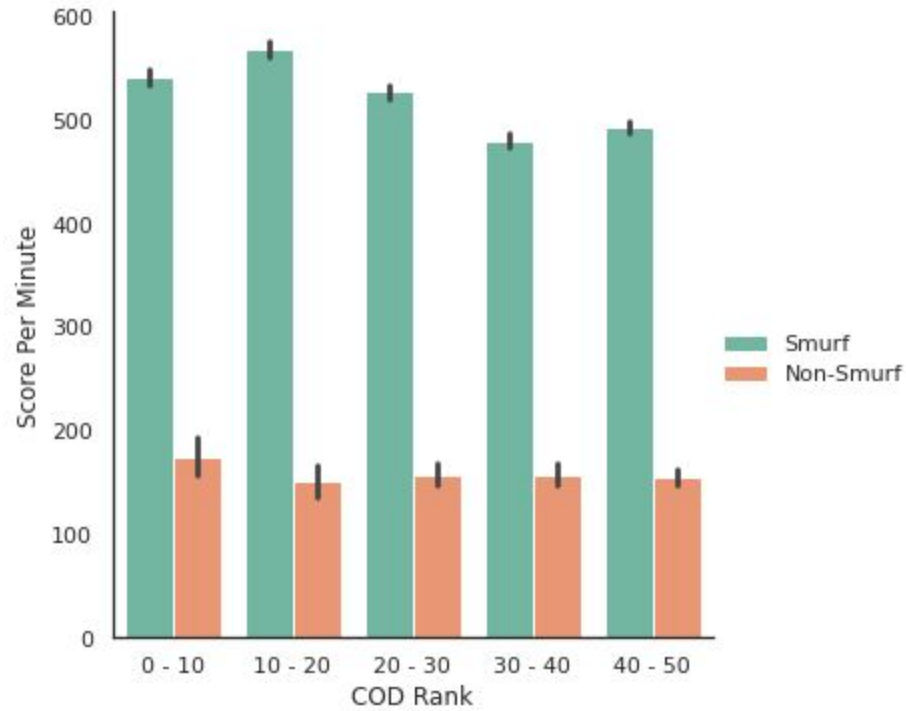
Smurf Performance: Headshot Count



Smurf Performance: Score Per Minute



Smurf Performance: Score Per Minute

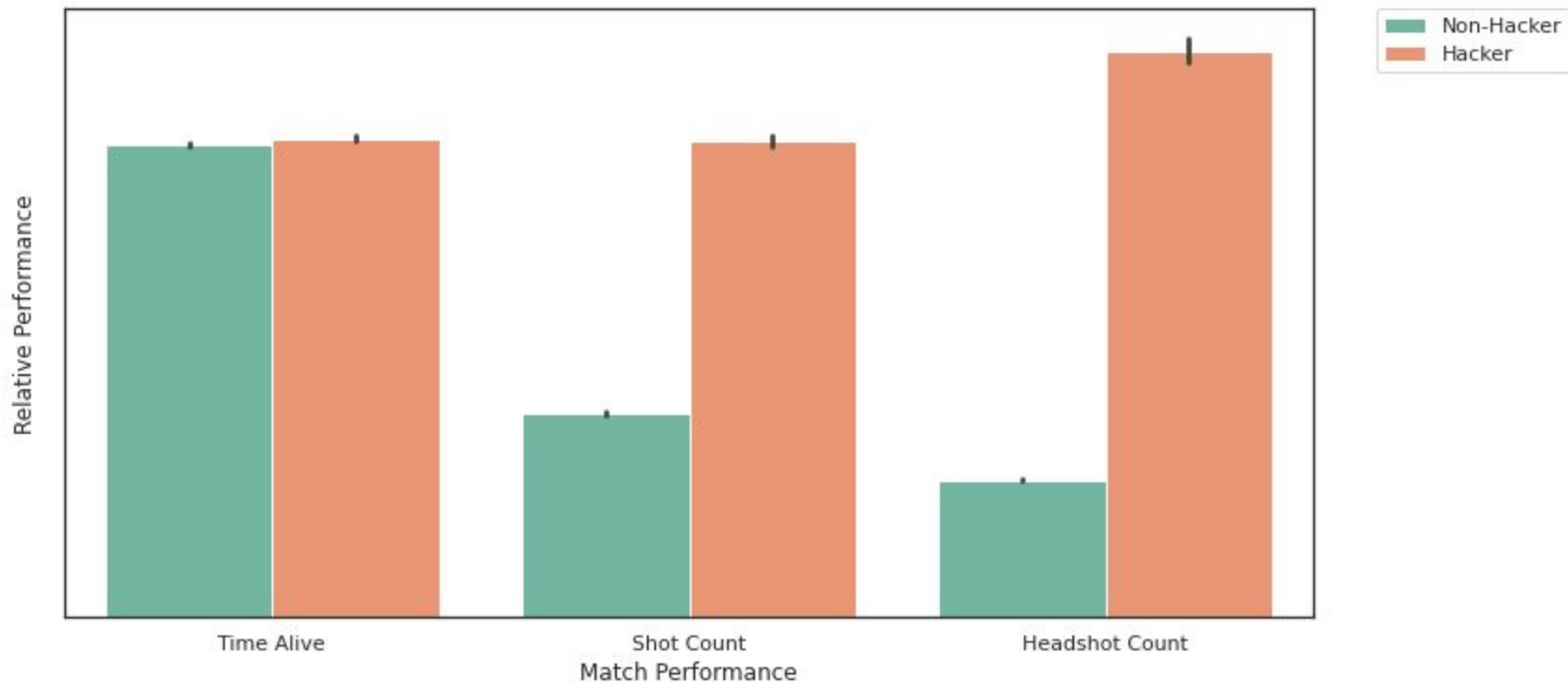


Hacking Software

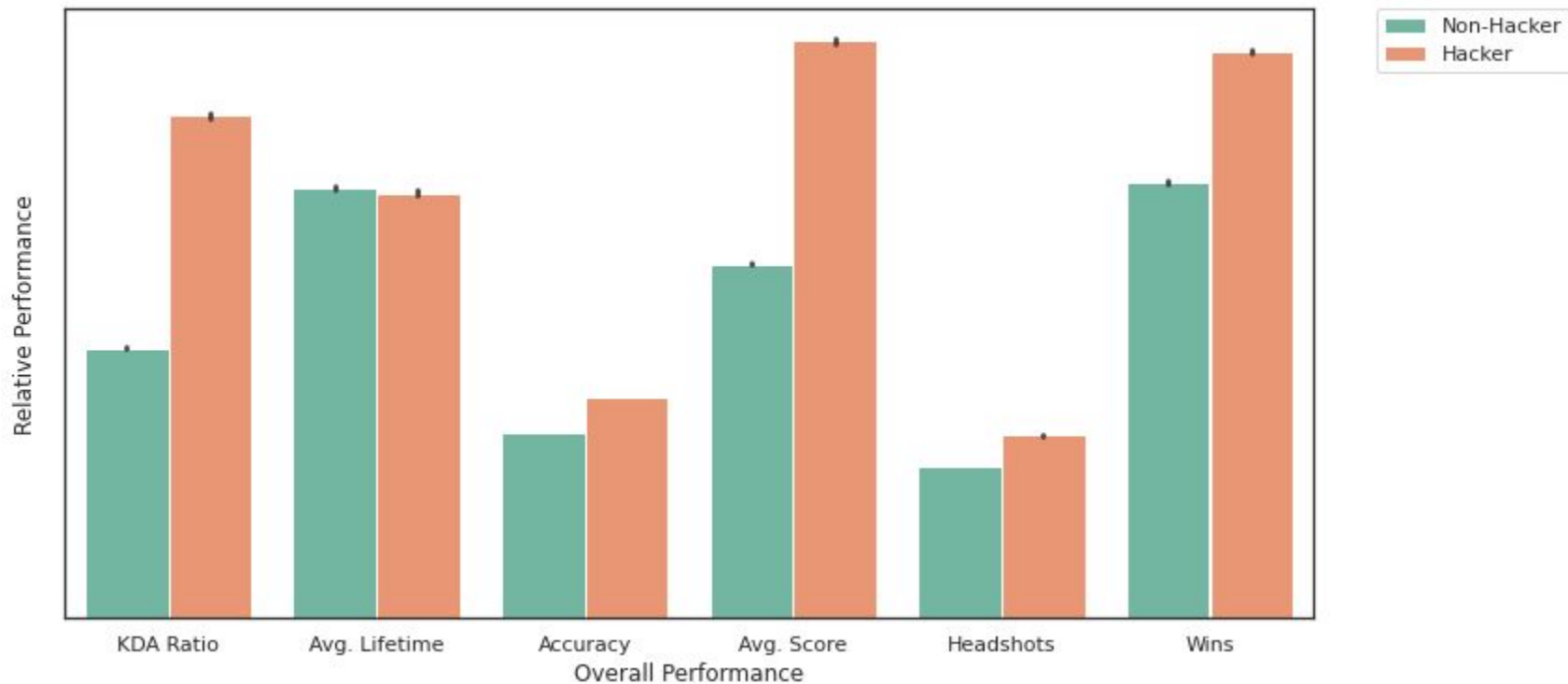
- Fluid Walls
- Location indicators
- Aim Bots



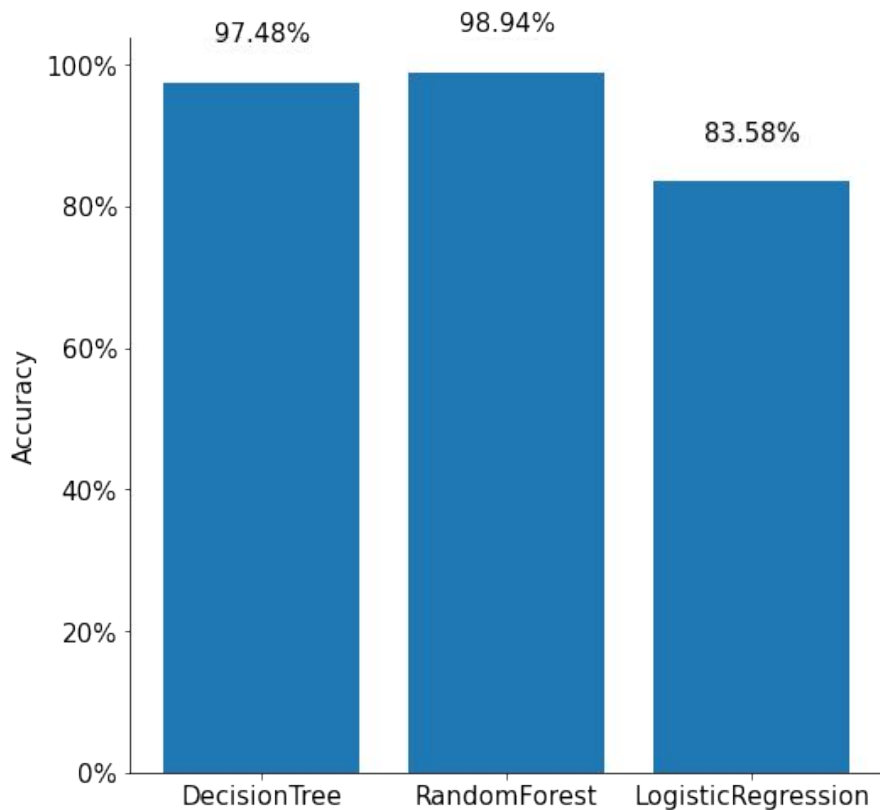
Hacker Match Performance



Hacker Overall Performance



Modeling Results and Future Considerations



Would like to improve:

- Multi-class labels
- Utilize full match history

Questions?

