I understand it will sound wrong for me to say this, being too young to have experienced many eras of basketball, but I already feel as if I grew up in the golden era of basketball. The early 2010’s had it all in the NBA world. Lebron James, the megastar loathed for not winning where he was supposed to win. The enigmatic Kobe Bryant’s career winding down. The imminent rise of the original OKC big three. The aging wonders in San Antonio, who I was too young to appreciate at the time. As a Knicks fan, I must include Carmelo Anthony making the Knicks watchable for a brief period - though watching Melo go on a scoring run was one of the more beautiful things to witness on a basketball court. And of course, a couple years into this era, the emergence of the Splash Bros in the Bay.

This era marked a time in the NBA where the skill level began to explode. The dynamic, do-it-all, wings with size, speed, and unbridled basketball skill. The guards who began to display shooting prowess, which would make many of those who grew up in an era without the three-point line consider this style of basketball black-magic. Before this time in basketball, the skill level league-wide allowed tactics to be more influential than in today’s game. Basketball was played in a way where there needed to be a master tactician at the helm. There were more organized offenses and distinct offensive styles throughout the league that became representative of who that coach was.

In the early 2010’s the carefully implemented offensive schemes were blessed with some of the greatest offensive talents the NBA has ever seen. It was the perfect time in the NBA.

I have always lived and breathed basketball and as an analytically-minded person, have had a natural draw to basketball analytics. When I attended school for data science, I found myself with the tools to actually produce analysis about whatever basketball question I had. **Netstats** is the culmination of a multitude of past basketball-themed data science work I’ve done, showcased in a web app.

Most basketball analytics work (and sports analytics work in general) today is about predicting player and team performance down to the most granular degree. A fool's errand in my opinion, and one that is driven by the explosion of the sports betting industry as everyone has become obsessed with the probability of player X getting 20+ points, 12+ rebounds, and 6+ assists - but it’s all a wash if he makes more than 5 threes. What I find more interesting is examining patterns in the NBA and within specific teams and, in a somewhat abstract way, quantifying a player’s “role”. While these insights may not lead anyone to an increased virtual wallet in their sportsbook of choice, they may help teams and fans *understand* teams and players with a different lens.

So why did I open with an ode to the 2010’s NBA? The goal of **netstats** is to visualize team dynamics from a stylistic perspective. I loved the style of basketball in the early 2010’s and, since that could be just my childhood rose-colored glasses doing the talking, I want to begin tracking offensive styles and team dynamics over time. The game of basketball is ever-evolving and as fans, we should be able to understand and visualize that.

Networks lie at the core of **netstats**. Networks where nodes represent players, and edges, the pass frequency between those players. What players orchestrate the flow of the ball? Which players stop the flow of the ball? Do teams, or certain players, pass more frequently to an inefficient scorer than the efficient one? What players are the offensive engines for their teams? These are all questions I’m trying to give insight to with **netstats**. There are some network-specific metrics used throughout this app. You do not need to be an expert in network science to understand what these metrics imply about players and teams and hopefully you’ll find the included definitions and explanations helpful.

Exploring **netstats** should be fun and fulfilling as a basketball fan - if there are metrics you think of related to this data, other features you want to see, or maybe even something you found interesting you want posted in this article section, please reach out. I’d love to collaborate on it.