



BAKER

PREDICTION ENGINE

Company Profile

SportsDataIO's real-time data & content is trusted by brands across sports betting, fantasy sports, social channels, and the media to power their applications, enhance fan experiences, and drive engagement through data-driven storytelling and gameplay.

History

Founded in 2008; foundation built upon proprietary data capture tools.

Data Collection

Self-collects pre/live/post game data supporting global sports.

Operations

50+ full time employees, 100+ data scouts and 250+ clients globally.

Advanced Tools

Fuels the **BAKER Prediction Engine**; leveraging AI & ML to sim 10k plays/game using in-house data.

Award Winning
Tech & Products



BAKER Prediction Engine

Simulating every game 10,000 times down to the play level, providing outputs that cover a full range of probabilistic outcomes. Combined with BAKER's Advanced Query API, BAKER can answer practically any question about a future outcome about a play, player, period, game or season

— Overview —

- ✓ **Full Range of Outcomes**
Averages, probabilities & histograms from every game's 10k sims.
- ✓ **Continuous Updates**
Sims are re-run when news breaks & data updates
- ✓ **Query Anything**
Our Build complex questions with dependencies across plays, drives, quarters, games, series, and seasons
- ✓ **Everything Correlated**
All simulations are correlated between teams<>players, offense<>defense & beyond

— Capabilities —

- ✓ **Odds Origination + Contest Creation**
Supports SGP, Props, and Alt Lines
- ✓ **Best Bets + Value Plays Against Active Odds**
- ✓ **Supercharge Research Tools and Optimizers**
Floor/Ceiling DFS Player Projections
- ✓ **Optimize Retail + E-Commerce Strategies**
- ✓ **Analyze Player Performance at the Game, Season, and Career Level**

BAYESIAN ARTIFICIAL INTELLIGENCE KNOWLEDGE EXTRAPOLATION REALIZER

BAKER Prediction Engine

— Technology —

- ✓ **Technology**
Built on AWS using Python
- ✓ **Simulations**
Monte Carlo sims utilizing dozens of input parameters and models. Bayesian interference for handling smaller sample sizes
- ✓ **Tuning**
Machine learning models are continuously re-trained to avoid stale predictions
- ✓ **Measuring**
Performance measured at the individual model level and macro level

— Success —

- ✓ **Top 10 % finish in SuperContest and Circa Millions**
- ✓ **Top 10 finish TallySight Moneyline expert rankings**
Out of 378 participants; 122 W vs 53 L (70%)
- ✓ **Super Contest 55%**
49-40-1 on NFL ATS (5 games/wk) = 55% (Best BETS)

BAYESIAN **A**RTIFICIAL INTELLIGENCE **K**NOWLEDGE **E**XTRAPOLATION **R**REALIZER

Benefits P-b-P Sims	BAKER Engine (Play-by-Play Simulations)	Game Outcome Simulations	Game-Level Machine Learning (No Simulations)
Average Results For Games, Teams, & Players	✓	✓	✓
Full Range Of Outcomes	✓	✓	✗
Predictions For All Active Players	✓	?	?
Median Player Probabilities	✓	?	✗
Full-Season Predictions w/ Same Algorithm	✓	?	✗
Internally-Consistent Results	✓	✗	✗
Correlations Between All Players	✓	✗	✗
Unique Stats (Longest Catch, First TD Scored, etc.)	✓	✗	✗
Intra-Game Probabilities (3 rd Quarter, 1 st -5 th , etc.)	✓	✗	✗
Exact Score Probabilities	✓	✗	✗
Detailed Team Projections (Offensive Yards, Errors, etc.)	✓	✗	✗
Probability For Alt Lines	✓	✗	✗
Probability Of Two Or More Events Happening	✓	✗	✗
Conditional Probabilities (Probability of X if Y and/or Z occurs)	✓	✗	✗
Account For Unlikely But Possible Events	✓	✗	✗

Driving Value

Operators	iGaming / Betting Tools	Fantasy	eCommerce
<ul style="list-style-type: none">• Odds Origination<ul style="list-style-type: none">• True Odds• Player Props• Future Markets• Same-Game Parlays• Correlated Play-by-Play Simulations• Alternate Lines	<ul style="list-style-type: none">• Best Bets• Value Plays• Power Parlay Builders• Interactive Betting Tools• Supplemental Content• Data Driven Insights• Personalized Messaging	<ul style="list-style-type: none">• Preseason Player Projections• Updated Weekly Player Projections• Research Tools• Supports Lineup Optimizers• Floor/Ceiling Performance for DFS and Season-Long	<ul style="list-style-type: none">• Optimize Tickets• Merchandise Pricing• Resource Planning Based on Tracking Fan Behavior• Inventory Levels• Traveling Patterns of Fan Bases at Major Sporting Events

BAKER Demo

[Home](#) [Demo](#) [Docs](#)

Ask BAKER Anything

League

What league are you interested in?


Next


Your Question

BAKER

BAKER Engine is the most advanced sports prediction engine on the planet. It simulates every sporting event 10,000 times down to the play level and lets you query it to find the answer to any question.

Contact us

 (610) 233-1333

 sales@sportsdata.io

BakerEngine.com/demo

Driving Value with Futures Probabilities

Top 3 AFC Teams



6-1



5-2



5-2

Top 3 NFC Teams



6-1



5-2



5-2

*As of Week 7 (2023)
Futures Update Weekly

Generating Futures Probabilities for Typical Markets:

- To make the Playoffs
- To Be a Conf Top Seed
- To Make the AFC or NFC Championship
- To Make the Super Bowl

Drilling Down Into Specific Scenarios:

- Explore the Range of Probabilities for Chiefs to win the Super Bowl if they face:
 - Eagles as NFC Champs
 - Lions as NFC Champs
 - 49ers as NFC Champs

Additional BAKER Benefits

Mapped IDs



SportsDataIO has taken the legwork out of development when it comes to switching data providers. We have mapped player, team, and game IDs from third party providers to ease new partner integration.

Aggregated Odds



Our flagship Aggregated Odds solution plugs directly into the BAKER Prediction Engine allowing BAKER to interpret the market(s) in a normalized structure that has clean odds/prices from legal onshore US sportsbooks.

Player Feeds



Supported by SportsDataIO's patented Players Feed, BAKER has access points feeding directly into SportsDataIO's injury feed, rosters, transactions feed, depth charts, and additional data sets.

Rich Historical Data



SportsDataIO has collected robust data sets for over 15 years, fueling BAKER with years of PBP data to support ML patterns dependent upon accurate and reliable data.

Case Study Betr

Overview



As a start-up DFS/sports betting platform, Betr was challenged to find a partner to support odds origination, and the development of player prop lines for their RMG contests.

Challenge



Betr had limited resources and a smaller team and was not in a position to develop odds/markets without BAKER. The diverse and scaling markets allow for an engaging and entertaining experience for their users.

Solution



BAKER allows for a plug-n-play solution to aid Betr's data scientists/trading team by offering true player prop odds for the platform. BAKER can scale with Betr's product roadmap supporting additional markets.

Result



SportsDataIO and the BAKER Prediction Engine helped fuel Betr's initial launch in 24 states and continue to enhance new props/odds and support their team with settlement verification across markets.

Note: Betr and SimpleBet are both partners with SportsDataIO and depend upon SportsDataIO's data + BAKER.

Leadership Team



Scott Gimpel

Founder & CEO

Before founding SportsDataIO, Scott lead engineering teams in the pharmaceutical sector to deploy new systems for shortening clinical and FDA review of new drugs. Fueled by his passion for sports and analytics, he saw a need for more data options in the US market



Dustin Sullivan

President & COO

Dustin joined SportsDataIO in 2015 after leading strategic and commercial efforts at Perform Group's sports data division in EMEA and later by opening North and South America operations



Kevin Day

CEO, LBS + BAKER Engine

Kevin Day is a technology leader with over 15 years of experience in sports technology. Before BAKER Engine, he was VP of Engineering of RVshare, the largest RV rental marketplace in the world



REAL-TIME SPORTS DATA
FOR GAMING, MEDIA & **BEYOND**

A baseball is positioned in the center of the frame, resting on a dark, textured surface that appears to be a baseball field. The baseball is slightly out of focus, with its stitching visible.

THANK YOU

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