

DISCRETE MARGIN MODELING AND
BEYOND:
A READABLE, MARGIN-NOTE EDITION
FOR FOOTBALL BETTING ANALYSIS
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We present a Tufte-style edition of the paper to improve readability via a narrow main text block and rich margin notes for exposition, references, and context. All technical content (discrete margin modeling, teaser/alt-line pricing, ML pipelines, Bayesian hierarchical modeling, and the ensembling framework) is unchanged; the presentation is optimized for human factors.

Readable line length Traditional research layouts often run 90–100+ characters per line. This handout keeps the main text near 60–75 characters per line (a widely-cited ergonomic range), improving scanning speed and reducing eye strain.

How to Use This Layout

SIDENOTES VS. FOOTNOTES. All footnotes are now margin *sidenotes*. Write `\footnote{...}` as usual; it will render in the outer margin with ample room for exposition, derivations, or further reading.

Margin figures and tables

Use `\begin{marginfigure}...\end{marginfigure}` for small figures in the margin, and `\begin{fullwidth}...\end{fullwidth}` for wide tables/figures that need extra space.

Market	Offered Odds	Fair Odds	EV
Two-leg 6-pt Teaser	−120	−112	+3.6%
Alt-Spread Parlay	−125	−118	+3.0%

Tip Use the margin to carry intuition, examples, and short proofs so the main argument flows. Keep main text tight; let the margin teach.

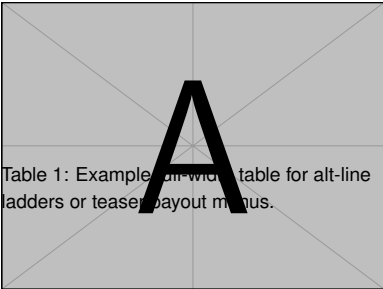


Figure 1: A margin figure (e.g., a key-number histogram for NFL margins). Use small, high-contrast visuals here.

Recommended packages and compile path

This template uses `tufte-handout`. It works with `pdfLATEX`. If you switch to `XeLATEX`/`LuaLATEX` you can load system fonts (e.g., `fontspec`)—but keep microtypography (`microtype`) on for best spacing.

Drop-in Replacement for Your Paper

Replace your previous article document with this one by copying your content into the sections below. All math, theorems, and figures work unchanged. Your bibliography can remain as `thebibliography` or you may switch to `BibTeX/biblatex`.

Introduction

¹ Point-spread betting in American football often revolves around key numbers (3, 7).

¹ Key-number intuition: NFL margins cluster at 3 and 7; the value of crossing these thresholds drives teaser/alt-line EV.

Alternative Strategies Similar to Wong Teasers

Machine-Learning Pipelines to Simulate NFL and NCAA Outcomes

Market microstructure Modern books dynamically price teasers. Replicate teaser moves with alt-lines when the ladder is softer than the teaser menu.

Bayesian Hierarchical Modeling for Dynamic Team Strength

Ensembling Heterogeneous Predictive Models for NFL Betting Decisions

²

² Blend at the *probability* level via linear pools, BMA, or log-score-optimal stacking; gate weights by context (totals/weather/season stage).

Integrated Workflow and Strategy Deployment

Conclusion

References

[1] Wong, Stanford. *Sharp Sports Betting*. Pi Yee Press, 2001.