

# OPTIMALITY OF DRAFT BOT STRATEGIES

RULER501

ABSTRACT. We seek to formalize the notion of an optimal draft starting from the notion that it should ensure all players have pools which can produce roughly equal power level decks. We then expand on the notion of optimality to introduce algorithms for the bots to follow to maximize the optimality of the resultant pools from the draft.

## CONTENTS

1. Introduction	1
1.1. Current Algorithms	1
2. A Formal Definition of Optimality	1
3. Proposal for Better Color Assignment	1
4. Proposal for Live Adjustment of Color Assignments	1
References	1

## 1. INTRODUCTION

1.1. **Current Algorithms.** The first step to assessing power level is to create a concept of card power level. CubeCobra currently has a system for this based on the ELO rating system traditionally used for chess 1. In this system we assess picks as pairwise competitions

## 2. A FORMAL DEFINITION OF OPTIMALITY

## 3. PROPOSAL FOR BETTER COLOR ASSIGNMENT

## 4. PROPOSAL FOR LIVE ADJUSTMENT OF COLOR ASSIGNMENTS

## REFERENCES

Wikipedia. (n.d.). *Elo rating system*. Retrieved from [https://en.wikipedia.org/wiki/Elo\\_rating\\_system](https://en.wikipedia.org/wiki/Elo_rating_system)

---

*Date:* March 4, 2020.