

Exploratory Search – Beyond the Query-Response Paradigm

Table of Contents (page numbers refer to draft manuscript)

Preface	4
Abstract	5
Chapter 1: Introduction	6
1.1 Overview	6
1.2 Background	9
1.3 Emerging Interest in Exploratory Search	15
1.4 Structure of the Lecture	16
Chapter 2: Defining Exploratory Search	17
2.1 Problem Context	20
2.2 Search Process	23
2.3 Modeling Exploratory Search Behavior	26
2.4 Differentiating Exploratory Search	35
2.5 Summary	36
Chapter 3: Related Work	37
3.1 Curiosity, Exploratory Behavior, and Browsing	37
3.2 Information Foraging	39
3.3 Berrypicking	42
3.4 Sense-making	45
3.5 Information-Seeking Processes and Behaviors	48
3.6 Cognitive Information Retrieval	53
3.7 Positioning Exploratory Search	55
3.8 Summary	57
Chapter 4: Features of Exploratory Search Systems	58
4.1 Support Querying and Rapid Query Refinement	60
4.2 Offer Facets and Metadata-based Result Filtering	62
4.3 Leverage Search Context	70
4.4 Offer Visualizations to Support Insight / Decision Making	72
4.5 Support Learning and Understanding	75
4.6 Facilitate Collaboration	76
4.7 Offer History, Workspaces, and Progress Updates	78
4.8 Support Task Management	80
4.9 Summary	81
Chapter 5: Evaluation of Exploratory Search Systems	82
5.1 Metrics	85
5.2 Methodology	89
5.3 Summary	93
Chapter 6: Future Directions and Concluding Remarks	95
6.1 Future Directions.....	95
6.2 Concluding Remarks.....	100
References	102
Biographies	123