

Chapter 1

Motivation

Human search ability

POMDP bottleneck

Non-Gauss uncertainty

Goals

Human decision making

Continuous POMDP

Non-Gauss state filter

Chapter 2

Background

Decision theory

MDP & POMDP

Acting under uncertainty

Chapter 3

Searching as humans

PbD-POMDP

Mixture of strategies

Risk prone & averse

Chapter 5

Non-parametric BSSE

Negative information

Sparse likelihood

Chapter 4

Peg in hole

RL-PbD-POMDP

Scale & precision

Human data

Chapter 6

Conclusion

Reached goal

Future work

Outlook