ECE1504 Projct

Potential Papers

- [ ] The Information Bottleneck Method
- [ ] Tightening Mutual Information Based Bounds on Generalization Error
- [ ] On a Connection between Importance Sampling and the Likelihood Ratio Policy Gradient
- [ ] Modeling Interaction via the Principle of Maximum Causal Entropy

Introduction

- [ ] Walk over the high-level ideas in the paper and inform the reader about what they emphasize on
- [ ] Highlight the key findings and aspects of the work
- [ ] Discuss the pros/cons at a very high-level

Related Work

- [ ] Throw light on the review carried out by the paper
- [ ] Emphasize on the pros/cons of previous works and how the paper has improved upon it
- [ ] Point out some of the open areas which the work discusses/touches upon
- [ ] Towards the end, discuss what could be improved from a literature point of view (more specifically highlight what has been done following the paper)

Method-1

- [ ] Discuss in detail the first method, its specifications, general discussions, comments, strengths, weaknesses, etc.
- [ ] This section should consist of all the goods and bads of the paper and proper reasoning as provided by the authors
- [ ] Inform the reader about something which is critical or novel, highlight if the authors missed something or a potential gap which arises
- [ ] Lay out potential problems (if any) with the approach or any scenarios in which it may not work well

Method-2

Exactly same as Method-1

Application Areas

- [ ] Have a broad discussion about the applictions, experiments, important findidngs of the work.
- [ ] Involve the reader into the goods and bads of the setup, its specifications, why is it essential from an application perspective.
- [ ] Lay out some possible areas of expansion or scenarios where the approach would work/perform better
- [ ] End the discussion by commenting upon the applicability of methods to practical settings (emphasize on how these translate to real life)

Conclusion

- ☐ Wrap up with your own conclusion of the papers and their scope for future research
- ☐ Do not forget to highlight the key pros/cons of the work
- ☐ Sum up theoretical guarantees, practical findings and the new directions

OFFICE HOUR

- ☐ Part 2, Problem 5 (c). Shouldn't the exponent be having a negative sign?
- ☐ Part 1, Problem 9 Part 1. Do we sketch the example in X space or Z space?
- ☐ The problem sets are indeed quite difficult. Would you have any suggestions on how to approach the problems?