

Current Highlights in NLP

AM 11 - Seminar

Sherzod Hakimov

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Winter Semester 2022-2023

Overview

- Who?
- What?
- How?

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Welcome!

Your instructor: Dr. Sherzod Hakimov

Background

- BSc, MSc in CS from TOBB University
- PhD from Bielefeld University
- 2019-2022 : Postdoc at Visual Analytics, Leibniz University Hannover & TIB (Technische Informationsbibliothek)
- 2022 - : Postdoc at Computational Linguistics, University of Potsdam

Research Interests

- Multimodal Machine Learning, Conversational AI, Natural Language Understanding

Contact

- **Email:** sherzod.hakimov@uni-potsdam.de
- **Office:** Haus 14, Room 2.25
- **Office hours:** arrange via email

Overview

- Who?
- What?
- How?

Motivation

- Find out about recent developments in the NLP world
- Learn to read and understand scientific publications
- Discuss the outcomes, shortcomings
- Critically review
- Come up with the follow up ideas
- Learn how to write scientific publications

Overview

- Who?
- What?
- How?

Role-Playing Reading Seminar¹

- Roles:
 - Scientific Peer Reviewer
 - Archaeologist
 - Academic Researcher
 - Industry Practitioner
 - Private Investigator
 - Social Impact Assessor
- Format
 - Scientific Peer Reviewer introduces the basics and important details
 - Other roles can start the discussion from there on
- Rotating Roles
 - Each week with a different role
 - Multiple roles can be assigned to multiple students

[1] Jacobson and Raffel (2021) “ Role-Playing Paper-Reading Seminars”, <https://colinraffel.com/blog/role-playing-seminar.html>

Role-Playing Reading Seminar



Scientific Peer Reviewer: The paper has not been published yet and is currently submitted to a top conference where you've been assigned as a peer reviewer. Complete a full review of the paper answering all prompts of the review form.

- Explain the paper to everyone backed up with details.

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Review Form:

Short summary (3-5 sentences): the main research question, the proposed methodology, experiments (scores, datasets, comparison to other work)

Contributions (1-3 sentences): novelty of the paper as bullet points

Strengths and reasons to accept (1-2 sentences): what makes this work worthy of publication

Weaknesses and limitations (1-2 sentences): the reasons to reject, what has been missed in the paper? What lacks in the experiments/evaluation?

Recommendation score: 1-10 (higher better)

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Archaeologist: You're an archeologist who must determine where this paper sits in the context of previous and subsequent work. Find and report on one older paper cited within the current paper that substantially influenced the current paper and one newer paper that cites this current paper (if available)

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Academic Researcher: You're a researcher who is working on a new project in this area. Propose an imaginary follow-up project not just based on the current but only possible due to the existence and success of the current paper

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Industry Practitioner: You work at a company or organization developing an application or product of your choice (that has not already been suggested in a prior session). Bring a convincing pitch for why you should be paid to implement the method in the paper

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Social Impact Assessor: Identify how this paper self-assesses its (likely positive) impact on the world. Have any additional positive social impacts left out? What are possible negative social impacts that were overlooked or omitted?

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Role Assignment

- Choose papers for the role: Scientific Peer Reviewer
- Other roles
 - Assigned automatically with different roles for each week
- Everyone else without roles for that specific week
 - Read the paper and prepare 1 question to be asked

Term Paper

- Clear structure
 - sections and subsections follow a logical order
 - must be organized into paragraphs, sections, and subsections
 - proper pay attention to how references

Term Paper

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 - sections and subsections follow a logical order
 - must be organized into paragraphs, sections, and subsections
 - proper pay attention to how references are used
- 4000-5000 words in English, no more than 12 pages
- Prepare in Lecture Notes in Computer Science (LNCS) format¹
- At the end of semester: send PDF via email to sherzod.hakimov@uni-potsdam.de

[1] LNCS Latex template: <https://www.overleaf.com/latex/templates/springer-lecture-notes-in-computer-science/kzwwwpvhwnvfj#.WtR5Hy5ua71>

LNCS PDF template: <https://v1.overleaf.com/latex/templates/springer-lecture-notes-in-computer-science/kzwwwpvhwnvfj.pdf>

LNCS Word template: http://blogs.evergreen.edu/sosw/files/2014/05/SOS_ProjectReportWordExampleWFigs.docx

Term Paper

- Clear structure.
 - sections and subsections follow a logical order
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- 4000-5000 words in English or German, no more than 12 pages
- Prepare in Lecture Notes in Computer Science (LNCS) format¹
- At the end of semester: send PDF via email to sherzod.hakimov@uni-potsdam.de

Write in your own words!

[1] LNCS Latex template: <https://www.overleaf.com/latex/templates/springer-lecture-notes-in-computer-science/kzwwwpvhwnvfj#.WtR5Hy5ua71>

LNCS PDF template: <https://v1.overleaf.com/latex/templates/springer-lecture-notes-in-computer-science/kzwwwpvhwnvfj.pdf>

LNCS Word template: http://blogs.evergreen.edu/sosw/files/2014/05/SOS_ProjectReportWordExampleWFigs.docx

Term Paper Structure (apply when possible)

- Title
- Introduction
 - Motivation
 - Problem definition and research questions
- Method and evaluation
 - Method: presentation of the theoretical basis, review of the specific literature on the topic
 - Evaluation: analysis, discussion of the proposed methods
- Conclusion
 - Focused summary
 - **Own evaluation and assessment**
- Future aspects
- References

Useful Links

- Moodle: <https://moodle2.uni-potsdam.de/course/view.php?id=34431>
- Paper Selection Document
 - Check the paper list on Moodle
 - Choose 3 papers for which you prefer to be Scientific Peer Reviewer (first-come-first-serve)
 - Other roles will be assigned automatically
 - Send the paper IDs **via email** till **23:59 on October 19, 2022**
 - **Subject:** Seminar NLP Highlights Paper Selection
 - **Body:** IDs of the paper. For ex: 1, 2, 3
 - **To:** sherzod.hakimov@uni-potsdam.de
- Weekly Discussions Document:
 - Link: <https://boxup.uni-potsdam.de/s/TCKZZr3EyL4Xmwj>, pass: YgBjN6FfZmeDWBG
 - Purpose: include material that you think is needed for the discussion (model architecture, short details in general)

Changes

- No seminar session on Oct 31 (national holiday)