

# Submission Summary

## Conference Name

Thirty-Fifth AAAI Conference on Artificial Intelligence

## Track Name

AI for Social Impact

## Paper ID

4682

## Paper Title

Identifying Guarantors of War Veterans Using Link Prediction Based on GraphSAGE: A Case of the Korean War

## Abstract

Many veterans who participated in the war suffer from mental and physical problems. In order to reward their sacrifice, each country provides veterans with various benefits and welfare. However, if service record is not recognized due to the loss of related official document, it is impossible to get these benefits. In such cases, 'buddy statement' can play an important role. However, many veterans are having difficulty of finding someone who can guarantee their participation in the war. To solve this problem, this study proposes a combined operations network in which veteran can find a guarantor who participated in the same battle. In case that it is difficult to find a guarantor directly for reasons such as death, link prediction can be used to identify highly relevant guarantors in this network. We apply our proposed approach to the Korean War data to train a combined operations network with GraphSAGE by sampling neighbors and using their various kinds of aggregating functions. The prediction performance compared to other baseline models showed the superiority of our proposed GraphSAGE-based approach.

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## Primary Subject Area

AI/SL: Humanities

## Secondary Subject Areas

AI/SL: Networks and Social Networks

## Submission Questions Response

### 1. Abstract and Paper Submission Policies

Agreement accepted

### 2. Submission Limit

Agreement accepted

### 3. Guidelines for Changes to Titles/Authors after Submissions

Agreement accepted

### 4. Blind Review Instructions

Agreement accepted

### 5. Policy Concerning Submissions to Other Conferences or Journals

Agreement accepted

### 6. Fast-track submission

This is a regular AAAI submission.

### 7. AAAI Publication Ethics and Malpractice Statement

Agreement accepted

### 8. AAAI Code of Professional Ethics and Conduct

Agreement accepted

### 9. Choice of Submission Venue

Agreement accepted

**10. Student Paper**

Yes

**11. Undergraduate Student Co-author**

Yes

**12. Reproducibility checklist (1)**

Yes

**13. Reproducibility checklist (2)**

Yes

**14. Reproducibility checklist (3)**

Yes

**15. Reproducibility checklist (4)**

Yes

**16. Reproducibility checklist (5)**

No

**17. Reproducibility checklist (5.1)**

[Not Answered]

**18. Reproducibility checklist (5.2)**

[Not Answered]

**19. Reproducibility checklist (5.3)**

[Not Answered]

**20. Reproducibility checklist (5.4)**

[Not Answered]

**21. Reproducibility checklist (5.5)**

[Not Answered]

**22. Reproducibility checklist (6)**

Yes

**23. Reproducibility checklist (6.1)**

Yes

**24. Reproducibility checklist (6.2)**

Yes

**25. Reproducibility checklist (6.3)**

Yes

**26. Reproducibility checklist (6.4)**

Yes

**27. Reproducibility checklist (6.5)**

Yes

**28. Reproducibility checklist (7)**

Yes

**29. Reproducibility checklist (7.1)**

Yes

**30. Reproducibility checklist (7.2)**

Yes

**31. Reproducibility checklist (7.3)**

Yes

**32. Reproducibility checklist (7.4)**

Yes

**33. Reproducibility checklist (7.5)**

Yes

**34. Reproducibility checklist (7.6)**

Yes

**35. Reproducibility checklist (7.7)**

Yes

**36. Reproducibility checklist (7.8)**

Yes

**37. Reproducibility checklist (7.9)**

Yes

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