

Stanford



Selen Bozkurt

Research Engineer, Med/BMIR

Bio

BIO

Selen Bozkurt is a biomedical informatician and biostatistician at Stanford University, Center for Biomedical Informatics Research. She was a postdoctoral scholar before, at Stanford Biomedical Data Science Department. Her research area and interests have focused on health informatics research using electronic health records, machine learning and natural language processing. She also has work experience as a biostatistician in several projects. She is a member of RSNA Radiology Reporting Committee since 2009. Her PhD dissertation work was entitled "A Real Time Decision Support System for Mammography Interpretations" in which she developed an automated system for deep information extraction from mammography reports and an approach for real-time decision support driven by analysis of dictated radiology reports.

EDUCATION AND CERTIFICATIONS

- PhD, Akdeniz University, Faculty of Medicine , Biostatistics and Medical Informatics
- Visiting PhD Student, Stanford University , Biomedical Informatics
- MSc, Akdeniz University, Faculty of Medicine , Biostatistics and Medical Informatics
- BSc, Dokuz Eylul University , Statistics

Publications

PUBLICATIONS

- **Phenotyping severity of patient-centered outcomes using clinical notes: A prostate cancer use case** *LEARNING HEALTH SYSTEMS*
Bozkurt, S., Paul, R., Coquet, J., Sun, R., Banerjee, I., Brooks, J. D., Hernandez-Boussard, T.
2020
- **MINIMAR (MINimum Information for Medical AI Reporting): Developing reporting standards for artificial intelligence in health care.** *Journal of the American Medical Informatics Association : JAMIA*
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2020
- **Acute pain after breast surgery and reconstruction: A two-institution study of surgical factors influencing short-term pain outcomes.** *Journal of surgical oncology*
Azad, A. D., Bozkurt, S., Wheeler, A. J., Curtin, C., Wagner, T. H., Hernandez-Boussard, T.
2020
- **Automated Detection of Measurements and Their Descriptors in Radiology Reports Using a Hybrid Natural Language Processing Algorithm.** *Journal of digital imaging*
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2019

- **Comparison of orthogonal NLP methods for clinical phenotyping and assessment of bone scan utilization among prostate cancer patients** *JOURNAL OF BIOMEDICAL INFORMATICS*
Coquet, J., Bozkurt, S., Kan, K. M., Ferrari, M. K., Blayney, D. W., Brooks, J. D., Hernandez-Boussard, T.
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- **A nomogram for decision-making of completion surgery in endometrial cancer diagnosed after hysterectomy.** *Archives of gynecology and obstetrics*
Bozkurt, S., Toptas, T., Aydin, H. A., Simsek, T., Yavuz, Y.
2019
- **Machine Learning Approaches for Extracting Stage from Pathology Reports in Prostate Cancer.** *Studies in health technology and informatics*
Lenain, R., Seneviratne, M. G., Bozkurt, S., Blayney, D. W., Brooks, J. D., Hernandez-Boussard, T.
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- **Natural Language Processing Approaches to Detect the Timeline of Metastatic Recurrence of Breast Cancer.** *JCO clinical cancer informatics*
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- **Comparison of Orthogonal NLP Methods for Clinical Phenotyping and Assessment of Bone Scan Utilization among Prostate Cancer Patients.** *Journal of biomedical informatics*
Coquet, J., Bozkurt, S., Kan, K. M., Ferrari, M. K., Blayney, D. W., Brooks, J. D., Hernandez-Boussard, T.
2019: 103184
- **Automatic Inference of BI-RADS Final Assessment Categories from Narrative Mammography Report Findings.** *Journal of biomedical informatics*
Banerjee, I., Bozkurt, S., Alkim, E., Sagreiya, H., Kurian, A. W., Rubin, D. L.
2019: 103137
- **Knowledge, attitudes and medical practice regarding hepatitis B prevention and management among healthcare workers in Northern Vietnam.** *PloS one*
Hang Pham, T. T., Le, T. X., Nguyen, D. T., Luu, C. M., Truong, B. D., Tran, P. D., Toy, M., Bozkurt, S., So, S.
2019; 14 (10): e0223733
- **Automatic inference of BI-RADS final assessment categories from narrative mammography report findings** *Journal of Biomedical Informatics*
Banerjee, I., Bozkurt, S., Alkim, E., Sagreiya, H., Kurian, A. W., Rubin, D. L.
2019
- **Is it possible to automatically assess pretreatment digital rectal examination documentation using natural language processing? A single-centre retrospective study.** *BMJ open*
Bozkurt, S., Kan, K. M., Ferrari, M. K., Rubin, D. L., Blayney, D. W., Hernandez-Boussard, T., Brooks, J. D.
2019; 9 (7): e027182
- **Impact of age on intermittent hypoxia in obstructive sleep apnea: a propensity-matched analysis** *SLEEP AND BREATHING*
Bostanci, A., Bozkurt, S., Turhan, M.
2018; 22 (2): 317–22
- **Expanding a radiology lexicon using contextual patterns in radiology reports.** *Journal of the American Medical Informatics Association : JAMIA*
Percha, B., Zhang, Y., Bozkurt, S., Rubin, D., Altman, R. B., Langlotz, C. P.
2018
- **Distribution of global health measures from routinely collected PROMIS surveys in patients with breast cancer or prostate cancer.** *Cancer*
Seneviratne, M. G., Bozkurt, S., Patel, M. I., Seto, T., Brooks, J. D., Blayney, D. W., Kurian, A. W., Hernandez-Boussard, T.
2018
- **An Automated Feature Engineering for Digital Rectal Examination Documentation using Natural Language Processing.** *AMIA ... Annual Symposium proceedings. AMIA Symposium*
Bozkurt, S., Park, J. I., Kan, K. M., Ferrari, M., Rubin, D. L., Brooks, J. D., Hernandez-Boussard, T.
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- **Impact of coexistent adenomyosis on outcomes of patients with endometrioid endometrial cancer: a propensity score-matched analysis** *TUMORI J*
Aydin, H., Toptas, T., Bozkurt, S., Pestereli, E., Simsek, T.
2018; 104 (1): 60–65

- **Can Statistical Machine Learning Algorithms Help for Classification of Obstructive Sleep Apnea Severity to Optimal Utilization of Polysomnography Resources?** *Methods of information in medicine*
Bozkurt, S., Bostanci, A., Turhan, M.
2017; 56 (4)
- **Usability Study of RSNA Radiology Reporting Template Library.** *Studies in health technology and informatics*
Hong, Y., Zhu, Y., Bozkurt, S., Zhang, J., Kahn, C. E.
2017; 245: 1325
- **Estimation of cardiovascular disease from polysomnographic parameters in sleep-disordered breathing** *EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY*
Turhan, M., Bostanci, A., Bozkurt, S.
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- **Using automatically extracted information from mammography reports for decision-support.** *Journal of biomedical informatics*
Bozkurt, S., Gimenez, F., Burnside, E. S., Gulkesen, K. H., Rubin, D. L.
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- **Automatic abstraction of imaging observations with their characteristics from mammography reports.** *Journal of the American Medical Informatics Association*
Bozkurt, S., Lipson, J. A., Senol, U., Rubin, D. L., Bulu, H.
2015; 22 (e1): e81-92
- **Automated detection of ambiguity in BI-RADS assessment categories in mammography reports.** *Studies in health technology and informatics*
Bozkurt, S., Rubin, D.
2014; 197: 35-39
- **Annotation for Information Extraction from Mammography Reports** *INFORMATICS, MANAGEMENT AND TECHNOLOGY IN HEALTHCARE*
Bozkurt, S., Gulkesen, K. H., Rubin, D.
2013; 190: 183-185
- **An Open-Standards Grammar for Outline-Style Radiology Report Templates** *JOURNAL OF DIGITAL IMAGING*
Bozkurt, S., Kahn, C. E.
2012; 25 (3): 359-364