

Sunghwan Sohn

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1559949/publications.pdf>

Version: 2024-02-01

90
papers

4,667
citations

172386

29
h-index

110317

64
g-index

92
all docs

92
docs citations

92
times ranked

4878
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Mayo clinical Text Analysis and Knowledge Extraction System (cTAKES): architecture, component evaluation and applications. Journal of the American Medical Informatics Association: JAMIA, 2010, 17, 507-513. | 2.2 | 1,413 |
| 2 | Clinical information extraction applications: A literature review. Journal of Biomedical Informatics, 2018, 77, 34-49. | 2.5 | 502 |
| 3 | A clinical text classification paradigm using weak supervision and deep representation. BMC Medical Informatics and Decision Making, 2019, 19, 1. | 1.5 | 348 |
| 4 | Deep learning and alternative learning strategies for retrospective real-world clinical data. Npj Digital Medicine, 2019, 2, 43. | 5.7 | 145 |
| 5 | Normalization and standardization of electronic health records for high-throughput phenotyping: the SHARPN consortium. Journal of the American Medical Informatics Association: JAMIA, 2013, 20, e341-e348. | 2.2 | 100 |
| 6 | Harmonizing Clinical Sequencing and Interpretation for the eMERGE III Network. American Journal of Human Genetics, 2019, 105, 588-605. | 2.6 | 99 |
| 7 | Abbreviation definition identification based on automatic precision estimates. BMC Bioinformatics, 2008, 9, 402. | 1.2 | 92 |
| 8 | Drug side effect extraction from clinical narratives of psychiatry and psychology patients. Journal of the American Medical Informatics Association: JAMIA, 2011, 18, i144-i149. | 2.2 | 88 |
| 9 | MedXN: an open source medication extraction and normalization tool for clinical text. Journal of the American Medical Informatics Association: JAMIA, 2014, 21, 858-865. | 2.2 | 88 |
| 10 | Clinical concept extraction: A methodology review. Journal of Biomedical Informatics, 2020, 109, 103526. | 2.5 | 86 |
| 11 | DEEPEN: A negation detection system for clinical text incorporating dependency relation into NegEx. Journal of Biomedical Informatics, 2015, 54, 213-219. | 2.5 | 79 |
| 12 | Natural language processing of clinical notes for identification of critical limb ischemia. International Journal of Medical Informatics, 2018, 111, 83-89. | 1.6 | 77 |
| 13 | An information extraction framework for cohort identification using electronic health records. AMIA Summits on Translational Science Proceedings, 2013, 2013, 149-53. | 0.4 | 76 |
| 14 | Mining peripheral arterial disease cases from narrative clinical notes using natural language processing. Journal of Vascular Surgery, 2017, 65, 1753-1761. | 0.6 | 75 |
| 15 | Desiderata for delivering NLP to accelerate healthcare AI advancement and a Mayo Clinic NLP-as-a-service implementation. Npj Digital Medicine, 2019, 2, 130. | 5.7 | 70 |
| 16 | Application of a Natural Language Processing Algorithm to Asthma Ascertainment. An Automated Chart Review. American Journal of Respiratory and Critical Care Medicine, 2017, 196, 430-437. | 2.5 | 67 |
| 17 | Automated chart review for asthma cohort identification using natural language processing: an exploratory study. Annals of Allergy, Asthma and Immunology, 2013, 111, 364-369. | 0.5 | 63 |
| 18 | Toward a Learning Health-care System – Knowledge Delivery at the Point of Care Empowered by Big Data and NLP. Biomedical Informatics Insights, 2016, 8s1, BII.S37977. | 4.6 | 56 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 19 | Clinical documentation variations and NLP system portability: a case study in asthma birth cohorts across institutions. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2018, 25, 353-359. | 2.2 | 52 |
| 20 | Automated chart review utilizing natural language processing algorithm for asthma predictive index. <i>BMC Pulmonary Medicine</i> , 2018, 18, 34. | 0.8 | 51 |
| 21 | Use of Natural Language Processing Algorithms to Identify Common Data Elements in Operative Notes for Total Hip Arthroplasty. <i>Journal of Bone and Joint Surgery - Series A</i> , 2019, 101, 1931-1938. | 1.4 | 50 |
| 22 | Comprehensive temporal information detection from clinical text: medical events, time, and TLINK identification. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2013, 20, 836-842. | 2.2 | 48 |
| 23 | Mayo clinic smoking status classification system: extensions and improvements. <i>AMIA ... Annual Symposium proceedings</i> , 2009, 2009, 619-23. | 0.2 | 45 |
| 24 | A Robust e-Epidemiology Tool in Phenotyping Heart Failure with Differentiation for Preserved and Reduced Ejection Fraction: the Electronic Medical Records and Genomics (eMERGE) Network. <i>Journal of Cardiovascular Translational Research</i> , 2015, 8, 475-483. | 1.1 | 44 |
| 25 | Detection of clinically important colorectal surgical site infection using Bayesian network. <i>Journal of Surgical Research</i> , 2017, 209, 168-173. | 0.8 | 42 |
| 26 | Optimal Training Sets for Bayesian Prediction of MeSH(R) Assignment. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2008, 15, 546-553. | 2.2 | 41 |
| 27 | Natural Language Processing for Asthma Ascertainment in Different Practice Settings. <i>Journal of Allergy and Clinical Immunology: in Practice</i> , 2018, 6, 126-131. | 2.0 | 40 |
| 28 | Modeling asynchronous event sequences with RNNs. <i>Journal of Biomedical Informatics</i> , 2018, 83, 167-177. | 2.5 | 39 |
| 29 | Use of Natural Language Processing Tools to Identify and Classify Periprosthetic Femur Fractures. <i>Journal of Arthroplasty</i> , 2019, 34, 2216-2219. | 1.5 | 38 |
| 30 | Developing a scalable FHIR-based clinical data normalization pipeline for standardizing and integrating unstructured and structured electronic health record data. <i>JAMIA Open</i> , 2019, 2, 570-579. | 1.0 | 35 |
| 31 | Postoperative bleeding risk prediction for patients undergoing colorectal surgery. <i>Surgery</i> , 2018, 164, 1209-1216. | 1.0 | 30 |
| 32 | Automated Detection of Periprosthetic Joint Infections and Data Elements Using Natural Language Processing. <i>Journal of Arthroplasty</i> , 2021, 36, 688-692. | 1.5 | 27 |
| 33 | Natural language processing of radiology reports for identification of skeletal site-specific fractures. <i>BMC Medical Informatics and Decision Making</i> , 2019, 19, 73. | 1.5 | 26 |
| 34 | Coreference analysis in clinical notes: a multi-pass sieve with alternate anaphora resolution modules. <i>Journal of the American Medical Informatics Association: JAMIA</i> , 2012, 19, 867-874. | 2.2 | 25 |
| 35 | Use of Natural Language Processing Algorithms to Identify Common Data Elements in Operative Notes for Knee Arthroplasty. <i>Journal of Arthroplasty</i> , 2021, 36, 922-926. | 1.5 | 25 |
| 36 | Artificial intelligence-assisted clinical decision support for childhood asthma management: A randomized clinical trial. <i>PLoS ONE</i> , 2021, 16, e0255261. | 1.1 | 25 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 37 | A Hybrid Approach to Sentiment Sentence Classification in Suicide Notes. Biomedical Informatics Insights, 2012, 5s1, BII.S8961. | 4.6 | 23 |
| 38 | Expert artificial intelligence-based natural language processing characterises childhood asthma. BMJ Open Respiratory Research, 2020, 7, e000524. | 1.2 | 20 |
| 39 | Dependency Parser-based Negation Detection in Clinical Narratives. AMIA Summits on Translational Science Proceedings, 2012, 2012, 1-8. | 0.4 | 20 |
| 40 | Ascertainment of asthma prognosis using natural language processing from electronic medical records. Journal of Allergy and Clinical Immunology, 2018, 141, 2292-2294.e3. | 1.5 | 19 |
| 41 | Automatic extraction and assessment of lifestyle exposures for Alzheimer's disease using natural language processing. International Journal of Medical Informatics, 2019, 130, 103943. | 1.6 | 18 |
| 42 | Ascertainment of Delirium Status Using Natural Language Processing From Electronic Health Records. Journals of Gerontology - Series A Biological Sciences and Medical Sciences, 2022, 77, 524-530. | 1.7 | 18 |
| 43 | Arrhythmia Variant Associations and Reclassifications in the eMERGE-III Sequencing Study. Circulation, 2022, 145, 877-891. | 1.6 | 18 |
| 44 | Patient-level temporal aggregation for text-based asthma status ascertainment. Journal of the American Medical Informatics Association: JAMIA, 2014, 21, 876-884. | 2.2 | 17 |
| 45 | Need of informatics in designing interoperable clinical registries. International Journal of Medical Informatics, 2017, 108, 78-84. | 1.6 | 17 |
| 46 | Deep Learning Prediction of Mild Cognitive Impairment using Electronic Health Records. , 2019, 2019, 799-806. | | 17 |
| 47 | Identifying Abdominal Aortic Aneurysm Cases and Controls using Natural Language Processing of Radiology Reports. AMIA Summits on Translational Science Proceedings, 2013, 2013, 249-53. | 0.4 | 17 |
| 48 | Identifying peripheral arterial disease cases using natural language processing of clinical notes. , 2016, 2016, 126-131. | | 16 |
| 49 | Predicate Oriented Pattern Analysis for Biomedical Knowledge Discovery. Intelligent Information Management, 2016, 08, 66-85. | 0.3 | 13 |
| 50 | Family History as a Risk Factor for Carotid Artery Stenosis. Stroke, 2014, 45, 2252-2256. | 1.0 | 12 |
| 51 | An aberration detection-based approach for sentinel syndromic surveillance of COVID-19 and other novel influenza-like illnesses. Journal of Biomedical Informatics, 2021, 113, 103660. | 2.5 | 12 |
| 52 | Classification of medication status change in clinical narratives. AMIA ... Annual Symposium proceedings, 2010, 2010, 762-6. | 0.2 | 11 |
| 53 | Analysis of Cross-Institutional Medication Description Patterns in Clinical Narratives. Biomedical Informatics Insights, 2013, 6s1, BII.S11634. | 4.6 | 10 |
| 54 | Early temporal characteristics of elderly patient cognitive impairment in electronic health records. BMC Medical Informatics and Decision Making, 2019, 19, 149. | 1.5 | 10 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 55 | Towards a semantic lexicon for clinical natural language processing. AMIA ... Annual Symposium proceedings, 2012, 2012, 568-76. | 0.2 | 10 |
| 56 | Integrating Structured and Unstructured EHR Data Using an FHIR-based Type System: A Case Study with Medication Data. AMIA Summits on Translational Science Proceedings, 2018, 2017, 74-83. | 0.4 | 10 |
| 57 | Identification of asthma control factor in clinical notes using a hybrid deep learning model. BMC Medical Informatics and Decision Making, 2021, 21, 272. | 1.5 | 10 |
| 58 | A hybrid model to identify fall occurrence from electronic health records. International Journal of Medical Informatics, 2022, 162, 104736. | 1.6 | 10 |
| 59 | Early Identification of Childhood Asthma: The Role of Informatics in an Era of Electronic Health Records. Frontiers in Pediatrics, 2019, 7, 113. | 0.9 | 8 |
| 60 | Detection of Surgical Site Infection Utilizing Automated Feature Generation in Clinical Notes. Journal of Healthcare Informatics Research, 2019, 3, 267-282. | 5.3 | 8 |
| 61 | Assessing socioeconomic bias in machine learning algorithms in health care: a case study of the HOUSES index. Journal of the American Medical Informatics Association: JAMIA, 2022, 29, 1142-1151. | 2.2 | 8 |
| 62 | A frequency-filtering strategy of obtaining PHI-free sentences from clinical data repository. , 2015, , . | | 7 |
| 63 | BmQGen: Biomedical query generator for knowledge discovery. , 2015, , . | | 7 |
| 64 | Delirium occurrence and association with outcomes in hospitalized COVID-19 patients. International Psychogeriatrics, 2021, 33, 1105-1109. | 0.6 | 7 |
| 65 | Ensemble of Evolving Neural Networks in Classification. Neural Processing Letters, 2004, 19, 191-203. | 2.0 | 6 |
| 66 | Asthma and risk of glioma: a population-based case-control study. BMJ Open, 2019, 9, e025746. | 0.8 | 6 |
| 67 | Loci identified by a genome-wide association study of carotid artery stenosis in the eMERGE network. Genetic Epidemiology, 2021, 45, 4-15. | 0.6 | 6 |
| 68 | Analysis of Clinical Variations in Asthma Care Documented in Electronic Health Records Between Staff and Resident Physicians. Studies in Health Technology and Informatics, 2017, 245, 1170-1174. | 0.2 | 6 |
| 69 | Standardizing Heterogeneous Annotation Corpora Using HL7 FHIR for Facilitating their Reuse and Integration in Clinical NLP. AMIA ... Annual Symposium proceedings, 2018, 2018, 574-583. | 0.2 | 6 |
| 70 | Artificial Intelligence Assesses Clinicians' Adherence to Asthma Guidelines Using Electronic Health Records. Journal of Allergy and Clinical Immunology: in Practice, 2022, 10, 1047-1056.e1. | 2.0 | 6 |
| 71 | Clinical Decision Support for Colonoscopy Surveillance Using Natural Language Processing. , 2012, , . | | 5 |
| 72 | Risk, Mechanisms and Implications of Asthma-Associated Infectious and Inflammatory Multimorbidities (AIMs) among Individuals With Asthma: a Systematic Review and a Case Study. Allergy, Asthma and Immunology Research, 2021, 13, 697. | 1.1 | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|--|-----|-----------|
| 73 | Facilitating post-surgical complication detection through sublanguage analysis. AMIA Summits on Translational Science Proceedings, 2014, 2014, 77-82. | 0.4 | 4 |
| 74 | A Text-Mining Framework for Supporting Systematic Reviews. , 2016, 1, 1-9. | | 4 |
| 75 | The Implication of Latent Information Quality to the Reproducibility of Secondary Use of Electronic Health Records. Studies in Health Technology and Informatics, 2022, , . | 0.2 | 4 |
| 76 | Automated Chart Review for Asthma Ascertainment: An Innovative Approach for Asthma Care and Research in the Era of Electronic Medical Record. Journal of Allergy and Clinical Immunology, 2016, 137, AB196. | 1.5 | 3 |
| 77 | Surveillance of Peripheral Arterial Disease Cases Using Natural Language Processing of Clinical Notes. AMIA Summits on Translational Science Proceedings, 2017, 2017, 28-36. | 0.4 | 3 |
| 78 | Evaluating the Impact of Dictionary Updates on Automatic Annotations Based on Clinical NLP Systems. AMIA Summits on Translational Science Proceedings, 2019, 2019, 714-721. | 0.4 | 3 |
| 79 | Early Alert of Elderly Cognitive Impairment using Temporal Streaming Clustering. , 2021, 2021, 905-912. | | 3 |
| 80 | Analysis of medication and indication occurrences in clinical notes. AMIA ... Annual Symposium proceedings, 2014, 2014, 1046-55. | 0.2 | 2 |
| 81 | Populating Physician Biographical Pages Based on EMR Data. AMIA Summits on Translational Science Proceedings, 2017, 2017, 522-530. | 0.4 | 2 |
| 82 | Multi-Center Validation of Natural Language Processing Algorithms for Detection of Common Data Elements in Operative Notes for Total Hip Arthroplasty (Preprint). JMIR Medical Informatics, 0, , . | 1.3 | 2 |
| 83 | A scoping review of medical practice variation research within the informatics literature. International Journal of Medical Informatics, 2022, 165, 104833. | 1.6 | 2 |
| 84 | Assessment of Heterogeneity of Childhood Asthma Using Medical Informatics Approaches. Journal of Allergy and Clinical Immunology, 2017, 139, AB202. | 1.5 | 1 |
| 85 | Establishing an expert consensus for the operational definitions of asthma-associated infectious and inflammatory multimorbidities for computational algorithms through a modified Delphi technique. BMC Medical Informatics and Decision Making, 2021, 21, 310. | 1.5 | 1 |
| 86 | Drug Normalization for Cancer Therapeutic and Druggable Genome Target Discovery. AMIA Summits on Translational Science Proceedings, 2015, 2015, 72-6. | 0.4 | 1 |
| 87 | Risk of pneumonia in asthmatic children using inhaled corticosteroids: a nested case-control study in a birth cohort. BMJ Open, 2022, 12, e051926. | 0.8 | 1 |
| 88 | Prediction of Incident Dementia Using Patient Temporal Health Status. Studies in Health Technology and Informatics, 2022, , . | 0.2 | 1 |
| 89 | Systematic Analysis of Cross-Institutional Medication Description Patterns in Clinical Notes. , 2012, , . | | 0 |
| 90 | Deep Learning Identification of Asthma Inhaler Techniques in Clinical Notes. , 2020, 2020, . | | 0 |