Sunghwan Sohn

List of Publications by Year
in descending order

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	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
2	Artificial Intelligence Assesses Cliniciansâ€™ Adherence to Asthma Guidelines Using Electronic Health Records. Journal of Allergy and Clinical Immunology: in Practice, 2022, 10, 1047-1056.e1.	2.0	6
3	Arrhythmia Variant Associations and Reclassifications in the eMERGE-III Sequencing Study. Circulation, 2022, 145, 877-891.	1.6	18
4	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
5	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
6	A hybrid model to identify fall occurrence from electronic health records. International Journal of Medical Informatics, 2022, 162, 104736.	1.6	10
7	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
8	Prediction of Incident Dementia Using Patient Temporal Health Status. Studies in Health Technology and Informatics, 2022, , .	0.2	1
9	A scoping review of medical practice variation research within the informatics literature. International Journal of Medical Informatics, 2022, 165, 104833.	1.6	2
10	Automated Detection of Periprosthetic Joint Infections and Data Elements Using Natural Language Processing. Journal of Arthroplasty, 2021, 36, 688-692.	1.5	27
11	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
12	Use of Natural Language Processing Algorithms to Identify Common Data Elements in Operative Notes for Knee Arthroplasty. Journal of Arthroplasty, 2021, 36, 922-926.	1.5	25
13	Loci identified by a genomeâ€wide association study of carotid artery stenosis in the eMERGE network. Genetic Epidemiology, 2021, 45, 4-15.	0.6	6
14	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
15	Artificial intelligence-assisted clinical decision support for childhood asthma management: A randomized clinical trial. PLoS ONE, 2021, 16, e0255261.	1.1	25
16	Delirium occurrence and association with outcomes in hospitalized COVID-19 patients. International Psychogeriatrics, 2021, 33, 1105-1109.	0.6	7
17	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
18	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

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19	Early Alert of Elderly Cognitive Impairment using Temporal Streaming Clustering. , 2021, 2021, 905-912.		3
20	Clinical concept extraction: A methodology review. Journal of Biomedical Informatics, 2020, 109, 103526.	2.5	86
21	Expert artificial intelligence-based natural language processing characterises childhood asthma. BMJ Open Respiratory Research, 2020, 7, e000524.	1.2	20
22	Deep Learning Identification of Asthma Inhaler Techniques in Clinical Notes. , 2020, 2020, .		0
23	Early temporal characteristics of elderly patient cognitive impairment in electronic health records. BMC Medical Informatics and Decision Making, 2019, 19, 149.	1.5	10
24	Use of Natural Language Processing Tools to Identify and Classify Periprosthetic Femur Fractures. Journal of Arthroplasty, 2019, 34, 2216-2219.	1.5	38
25	Developing a scalable FHIR-based clinical data normalization pipeline for standardizing and integrating unstructured and structured electronic health record data. JAMIA Open, 2019, 2, 570-579.	1.0	35
26	Automatic extraction and assessment of lifestyle exposures for Alzheimerâ€™s disease using natural language processing. International Journal of Medical Informatics, 2019, 130, 103943.	1.6	18
27	Harmonizing Clinical Sequencing and Interpretation for the eMERGE III Network. American Journal of Human Genetics, 2019, 105, 588-605.	2.6	99
28	Asthma and risk of glioma: a population-based caseâ€“control study. BMJ Open, 2019, 9, e025746.	0.8	6
29	Deep learning and alternative learning strategies for retrospective real-world clinical data. Npj Digital Medicine, 2019, 2, 43.	5.7	145
30	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
31	Natural language processing of radiology reports for identification of skeletal site-specific fractures. BMC Medical Informatics and Decision Making, 2019, 19, 73.	1.5	26
32	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
33	Deep Learning Prediction of Mild Cognitive Impairment using Electronic Health Records. , 2019, 2019, 799-806.		17
34	Use of Natural Language Processing Algorithms to Identify Common Data Elements in Operative Notes for Total Hip Arthroplasty. Journal of Bone and Joint Surgery - Series A, 2019, 101, 1931-1938.	1.4	50
35	Detection of Surgical Site Infection Utilizing Automated Feature Generation in Clinical Notes. Journal of Healthcare Informatics Research, 2019, 3, 267-282.	5.3	8
36	A clinical text classification paradigm using weak supervision and deep representation. BMC Medical Informatics and Decision Making, 2019, 19, 1.	1.5	348

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37	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
38	Clinical information extraction applications: A literature review. Journal of Biomedical Informatics, 2018, 77, 34-49.	2.5	502
39	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
40	Clinical documentation variations and NLP system portability: a case study in asthma birth cohorts across institutions. Journal of the American Medical Informatics Association: JAMIA, 2018, 25, 353-359.	2.2	52
41	Natural language processing of clinical notes for identification of critical limb ischemia. International Journal of Medical Informatics, 2018, 111, 83-89.	1.6	77
42	Automated chart review utilizing natural language processing algorithm for asthma predictive index. BMC Pulmonary Medicine, 2018, 18, 34.	0.8	51
43	Natural Language Processing for Asthma Ascertainment in Different Practice Settings. Journal of Allergy and Clinical Immunology: in Practice, 2018, 6, 126-131.	2.0	40
44	Postoperative bleeding risk prediction for patients undergoing colorectal surgery. Surgery, 2018, 164, 1209-1216.	1.0	30
45	Modeling asynchronous event sequences with RNNs. Journal of Biomedical Informatics, 2018, 83, 167-177.	2.5	39
46	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
47	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
48	Mining peripheral arterial disease cases from narrative clinical notes using natural language processing. Journal of Vascular Surgery, 2017, 65, 1753-1761.	0.6	75
49	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
50	Assessment of Heterogeneity of Childhood Asthma Using Medical Informatics Approaches. Journal of Allergy and Clinical Immunology, 2017, 139, AB202.	1.5	1
51	Need of informatics in designing interoperable clinical registries. International Journal of Medical Informatics, 2017, 108, 78-84.	1.6	17
52	Detection of clinically important colorectal surgical site infection using Bayesian network. Journal of Surgical Research, 2017, 209, 168-173.	0.8	42
53	Populating Physician Biographical Pages Based on EMR Data. AMIA Summits on Translational Science Proceedings, 2017, 2017, 522-530.	0.4	2
54	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

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55	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
56	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
57	Identifying peripheral arterial disease cases using natural language processing of clinical notes. , 2016, 2016, 126-131.		16
58	Toward a Learning Health-care System â€“ Knowledge Delivery at the Point of Care Empowered by Big Data and NLP. Biomedical Informatics Insights, 2016, 8s1, BII.S37977.	4.6	56
59	Predicate Oriented Pattern Analysis for Biomedical Knowledge Discovery. Intelligent Information Management, 2016, 08, 66-85.	0.3	13
60	A Text-Mining Framework for Supporting Systematic Reviews. , 2016, 1, 1-9.		4
61	A frequency-filtering strategy of obtaining PHI-free sentences from clinical data repository. , 2015, , .		7
62	BmQGen: Biomedical query generator for knowledge discovery. , 2015, , .		7
63	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. Journal of Cardiovascular Translational Research, 2015, 8, 475-483.	1.1	44
64	DEEPEN: A negation detection system for clinical text incorporating dependency relation into NegEx. Journal of Biomedical Informatics, 2015, 54, 213-219.	2.5	79
65	Drug Normalization for Cancer Therapeutic and Druggable Genome Target Discovery. AMIA Summits on Translational Science Proceedings, 2015, 2015, 72-6.	0.4	1
66	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
67	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
68	Family History as a Risk Factor for Carotid Artery Stenosis. Stroke, 2014, 45, 2252-2256.	1.0	12
69	Facilitating post-surgical complication detection through sublanguage analysis. AMIA Summits on Translational Science Proceedings, 2014, 2014, 77-82.	0.4	4
70	Analysis of medication and indication occurrences in clinical notes. AMIA ... Annual Symposium proceedings, 2014, 2014, 1046-55.	0.2	2
71	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
72	Comprehensive temporal information detection from clinical text: medical events, time, and TLINK identification. Journal of the American Medical Informatics Association: JAMIA, 2013, 20, 836-842.	2.2	48

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73	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
74	Analysis of Cross-Institutional Medication Description Patterns in Clinical Narratives. Biomedical Informatics Insights, 2013, 6s1, BII.S11634.	4.6	10
75	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
76	An information extraction framework for cohort identification using electronic health records. AMIA Summits on Translational Science Proceedings, 2013, 2013, 149-53.	0.4	76
77	Systematic Analysis of Cross-Institutional Medication Description Patterns in Clinical Notes. , 2012, , .		0
78	Clinical Decision Support for Colonoscopy Surveillance Using Natural Language Processing. , 2012, , .		5
79	A Hybrid Approach to Sentiment Sentence Classification in Suicide Notes. Biomedical Informatics Insights, 2012, 5s1, BII.S8961.	4.6	23
80	Coreference analysis in clinical notes: a multi-pass sieve with alternate anaphora resolution modules. Journal of the American Medical Informatics Association: JAMIA, 2012, 19, 867-874.	2.2	25
81	Dependency Parser-based Negation Detection in Clinical Narratives. AMIA Summits on Translational Science Proceedings, 2012, 2012, 1-8.	0.4	20
82	Towards a semantic lexicon for clinical natural language processing. AMIA ... Annual Symposium proceedings, 2012, 2012, 568-76.	0.2	10
83	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
84	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
85	Classification of medication status change in clinical narratives. AMIA ... Annual Symposium proceedings, 2010, 2010, 762-6.	0.2	11
86	Mayo clinic smoking status classification system: extensions and improvements. AMIA ... Annual Symposium proceedings, 2009, 2009, 619-23.	0.2	45
87	Abbreviation definition identification based on automatic precision estimates. BMC Bioinformatics, 2008, 9, 402.	1.2	92
88	Optimal Training Sets for Bayesian Prediction of MeSH(R) Assignment. Journal of the American Medical Informatics Association: JAMIA, 2008, 15, 546-553.	2.2	41
89	Ensemble of Evolving Neural Networks in Classification. Neural Processing Letters, 2004, 19, 191-203.	2.0	6
90	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