

# Fei-Pei Lai

## List of Publications by Year in descending order

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Version: 2024-02-01

148  
papers

1,552  
citations

394421

19  
h-index

477307

29  
g-index

168  
all docs

168  
docs citations

168  
times ranked

1902  
citing authors

#	ARTICLE	IF	CITATIONS
1	Application of multiple deep learning models for automatic burn wound assessment. <i>Burns</i> , 2023, 49, 1039-1051.	1.9	6
2	Clinical characteristics of influenza with or without <i>Streptococcus pneumoniae</i> co-infection in children. <i>Journal of the Formosan Medical Association</i> , 2022, 121, 950-957.	1.7	7
3	RSV pneumonia with or without bacterial co-infection among healthy children. <i>Journal of the Formosan Medical Association</i> , 2022, 121, 687-693.	1.7	17
4	Lagrange interpolation-driven access control mechanism: Towards secure and privacy-preserving fusion of personal health records. <i>Knowledge-Based Systems</i> , 2022, 236, 107679.	7.1	6
5	Panic Attack Prediction Using Wearable Devices and Machine Learning: Development and Cohort Study. <i>JMIR Medical Informatics</i> , 2022, 10, e33063.	2.6	18
6	Clinical characteristics of recurrent pneumonia in children with or without underlying diseases. <i>Journal of the Formosan Medical Association</i> , 2022, 121, 1073-1080.	1.7	2
7	Evaluation of the Need for Intensive Care in Children With Pneumonia: Machine Learning Approach. <i>JMIR Medical Informatics</i> , 2022, 10, e28934.	2.6	4
8	Comparison of GATK and DeepVariant by trio sequencing. <i>Scientific Reports</i> , 2022, 12, 1809.	3.3	26
9	The Prevalence and Impact of Fake News on COVID-19 Vaccination in Taiwan: Retrospective Study of Digital Media. <i>Journal of Medical Internet Research</i> , 2022, 24, e36830.	4.3	17
10	Using Text Content From Coronary Catheterization Reports to Predict 5-Year Mortality Among Patients Undergoing Coronary Angiography: A Deep Learning Approach. <i>Frontiers in Cardiovascular Medicine</i> , 2022, 9, 800864.	2.4	2
11	Deep learning approach based on superpixel segmentation assisted labeling for automatic pressure ulcer diagnosis. <i>PLoS ONE</i> , 2022, 17, e0264139.	2.5	16
12	The association of anemia with the clinical outcomes of community-acquired pneumonia in children. <i>Pediatric Pulmonology</i> , 2022, , .	2.0	0
13	Mobile time banking on blockchain system development for community elderly care. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 2022, , 1-13.	4.9	1
14	The necessity of abdominal drainage for patients with complicated appendicitis undergoing laparoscopic appendectomy: a retrospective cohort study. <i>World Journal of Emergency Surgery</i> , 2022, 17, 16.	5.0	8
15	A pressure ulcers assessment system for diagnosis and decision making using convolutional neural networks. <i>Journal of the Formosan Medical Association</i> , 2022, 121, 2227-2236.	1.7	12
16	Predicting Postoperative Mortality With Deep Neural Networks and Natural Language Processing: Model Development and Validation. <i>JMIR Medical Informatics</i> , 2022, 10, e38241.	2.6	8
17	Automatic International Classification of Diseases Coding System: Deep Contextualized Language Model With Rule-Based Approaches. <i>JMIR Medical Informatics</i> , 2022, 10, e37557.	2.6	4
18	Disease Concept-Embedding Based on the Self-Supervised Method for Medical Information Extraction from Electronic Health Records and Disease Retrieval: Algorithm Development and Validation Study. <i>Journal of Medical Internet Research</i> , 2021, 23, e25113.	4.3	14

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19	CT-Based Collision Prediction Software for External-Beam Radiation Therapy. <i>Frontiers in Oncology</i> , 2021, 11, 617007.	2.8	2
20	Acute Exacerbation of a Chronic Obstructive Pulmonary Disease Prediction System Using Wearable Device Data, Machine Learning, and Deep Learning: Development and Cohort Study. <i>JMIR MHealth and UHealth</i> , 2021, 9, e22591.	3.7	53
21	Benchmarking of eight recurrent neural network variants for breath phase and adventitious sound detection on a self-developed open-access lung sound databaseâ€”HF_Lung_V1. <i>PLoS ONE</i> , 2021, 16, e0254134.	2.5	35
22	Artificial Intelligenceâ€”Assisted Early Detection of Retinitis Pigmentosa â€” the Most Common Inherited Retinal Degeneration. <i>Journal of Digital Imaging</i> , 2021, 34, 948-958.	2.9	12
23	Automatic ICD-10 Coding and Training System: Deep Neural Network Based on Supervised Learning. <i>JMIR Medical Informatics</i> , 2021, 9, e23230.	2.6	26
24	The intracranial tumor segmentation challenge: Contour tumors on brain MRI for radiosurgery. <i>NeuroImage</i> , 2021, 244, 118585.	4.2	6
25	Deep Learning-Based Segmentation of Various Brain Lesions for Radiosurgery. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 9180.	2.5	6
26	Deep Learningâ€”Assisted Burn Wound Diagnosis: Diagnostic Model Development Study. <i>JMIR Medical Informatics</i> , 2021, 9, e22798.	2.6	6
27	Physician decision support system for idiopathic sudden sensorineural hearing loss patients. <i>Journal of the Chinese Medical Association</i> , 2021, 84, 101-107.	1.4	5
28	Surgical Wounds Assessment System for Self-Care. <i>IEEE Transactions on Systems, Man, and Cybernetics: Systems</i> , 2020, 50, 5076-5091.	9.3	9
29	Applying time-constraint access control of personal health record in cloud computing. <i>Enterprise Information Systems</i> , 2020, 14, 266-281.	4.7	7
30	Mobile Social Service User Identification Framework Based on Action-Characteristic Data Retention. <i>IEEE Access</i> , 2020, 8, 127748-127767.	4.2	0
31	A Unified Framework for Automatic Detection of Wound Infection with Artificial Intelligence. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 5353.	2.5	16
32	Frequency and spectrum of actionable pathogenic secondary findings in Taiwanese exomes. <i>Molecular Genetics &amp; Genomic Medicine</i> , 2020, 8, e1455.	1.2	14
33	A nomogram for estimating intracranial pressure using acute subdural hematoma thickness and midline shift. <i>Scientific Reports</i> , 2020, 10, 21787.	3.3	2
34	Impact of tobacco-related chronic obstructive pulmonary disease on developmental trajectories of comorbidities in the Taiwan population. <i>Scientific Reports</i> , 2020, 10, 21025.	3.3	3
35	Characteristics of Harmonic Indexes of the Arterial Blood Pressure Waveform in Type 2 Diabetes Mellitus. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 638.	4.1	6
36	Support vector machine prediction of obstructive sleep apnea in a large-scale Chinese clinical sample. <i>Sleep</i> , 2020, 43, .	1.1	29

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37	Modified Bidirectional Encoder Representations From Transformers Extractive Summarization Model for Hospital Information Systems Based on Character-Level Tokens (AlphaBERT): Development and Performance Evaluation. <i>JMIR Medical Informatics</i> , 2020, 8, e17787.	2.6	17
38	A Smartphone-Based Approach to Screening for Sudden Sensorineural Hearing Loss: Cross-Sectional Validity Study. <i>JMIR MHealth and UHealth</i> , 2020, 8, e23047.	3.7	13
39	Threat Analysis for Wearable Health Devices and Environment Monitoring Internet of Things Integration System. <i>IEEE Access</i> , 2019, 7, 144983-144994.	4.2	19
40	Chronic wound assessment and infection detection method. <i>BMC Medical Informatics and Decision Making</i> , 2019, 19, 99.	3.0	26
41	Brain Tumor Segmentation Using U-Net and Edge Contour Enhancement. , 2019, , .		4
42	Using a smartwatch with real-time feedback improves the delivery of high-quality cardiopulmonary resuscitation by healthcare professionals. <i>Resuscitation</i> , 2019, 140, 16-22.	3.0	29
43	Metformin use mitigates the adverse prognostic effect of diabetes mellitus in chronic obstructive pulmonary disease. <i>Respiratory Research</i> , 2019, 20, 69.	3.6	47
44	Critical Trio Exome Benefits In-Time Decision-Making for Pediatric Patients With Severe Illnesses*. <i>Pediatric Critical Care Medicine</i> , 2019, 20, 1021-1026.	0.5	29
45	Wearable-Based Mobile Health App in Gastric Cancer Patients for Postoperative Physical Activity Monitoring: Focus Group Study. <i>JMIR MHealth and UHealth</i> , 2019, 7, e11989.	3.7	28
46	A Mobile Phone-Based Approach for Hearing Screening of School-Age Children: Cross-Sectional Validation Study. <i>JMIR MHealth and UHealth</i> , 2019, 7, e12033.	3.7	26
47	A Web-Based Clinical System for Cohort Surveillance of Specific Clinical Effectiveness and Safety Outcomes: A Cohort Study of Non-Vitamin K Antagonist Oral Anticoagulants and Warfarin. <i>JMIR Medical Informatics</i> , 2019, 7, e13329.	2.6	1
48	Visualization and Sonification of Long-Term Epilepsy Electroencephalogram Monitoring. <i>Journal of Medical and Biological Engineering</i> , 2018, 38, 943-952.	1.8	10
49	An Implementation of Interactive Healthy Eating Index and Healthcare System on Mobile Platform in College Student Samples. <i>IEEE Access</i> , 2018, 6, 71651-71661.	4.2	7
50	Validity of ICD9-CM codes to diagnose chronic obstructive pulmonary disease from National Health Insurance claim data in Taiwan. <i>International Journal of COPD</i> , 2018, Volume 13, 3055-3063.	2.3	47
51	A novel depth estimation algorithm of chest compression for feedback of high-quality cardiopulmonary resuscitation based on a smartwatch. <i>Journal of Biomedical Informatics</i> , 2018, 87, 60-65.	4.3	18
52	A Comprehensive Overview of Government Hacking Worldwide. <i>IEEE Access</i> , 2018, 6, 55053-55073.	4.2	1
53	Preoperative biliary drainage associated with biliary stricture after pancreaticoduodenectomy: a population-based study. <i>Journal of Hepato-Biliary-Pancreatic Sciences</i> , 2018, 25, 308-318.	2.6	9
54	Identifying Unmet Treatment Needs for Patients With Osteoporotic Fracture: Feasibility Study for an Electronic Clinical Surveillance System. <i>Journal of Medical Internet Research</i> , 2018, 20, e142.	4.3	5

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55	GA-SVM modeling of multiclass seizure detector in epilepsy analysis system using cloud computing. <i>Soft Computing</i> , 2017, 21, 2139-2149.	3.6	9
56	Smart computing mechanism for noise detection and elimination in ECG signal. , 2017, , .		1
57	Diabetes mellitus in patients with chronic obstructive pulmonary disease-The impact on mortality. <i>PLoS ONE</i> , 2017, 12, e0175794.	2.5	47
58	Confidentiality Protection of Digital Health Records in Cloud Computing. <i>Journal of Medical Systems</i> , 2016, 40, 124.	3.6	33
59	Effectiveness of Telemonitoring in Patients with Chronic Obstructive Pulmonary Disease in Taiwan-A Randomized Controlled Trial. <i>Scientific Reports</i> , 2016, 6, 23797.	3.3	56
60	Insider Collusion Attack on Privacy-Preserving Kernel-Based Data Mining Systems. <i>IEEE Access</i> , 2016, 4, 2244-2255.	4.2	10
61	Total gastrectomy improves glucose metabolism on gastric cancer patients: a nationwide population-based study. <i>Surgery for Obesity and Related Diseases</i> , 2016, 12, 635-641.	1.2	14
62	Robust dermatological wound image segmentation in clinical photos. , 2015, , .		3
63	High-Performance Multiclass Classification Framework Using Cloud Computing Architecture. <i>Journal of Medical and Biological Engineering</i> , 2015, 35, 795-802.	1.8	2
64	Characteristics of 5-year surveillance system with synchronous telehealthcare in Taiwan. , 2015, , .		0
65	Tablet PC-enabled application intervention for patients with gastric cancer undergoing gastrectomy. <i>Computer Methods and Programs in Biomedicine</i> , 2015, 119, 101-109.	4.7	22
66	A cross-hospital cost and quality assessment system by extracting frequent physician order set from a nationwide Health Insurance Research Database. <i>Computer Methods and Programs in Biomedicine</i> , 2015, 120, 142-153.	4.7	3
67	Improvement of heart rate variability after decreased insulin resistance after sleeve gastrectomy for morbidly obesity patients. <i>Surgery for Obesity and Related Diseases</i> , 2015, 11, 557-563.	1.2	18
68	A Web-Based, Hospital-Wide Health Care-Associated Bloodstream Infection Surveillance and Classification System: Development and Evaluation. <i>JMIR Medical Informatics</i> , 2015, 3, e31.	2.6	12
69	A Telesurveillance System With Automatic Electrocardiogram Interpretation Based on Support Vector Machine and Rule-Based Processing. <i>JMIR Medical Informatics</i> , 2015, 3, e21.	2.6	14
70	CloudDOE: A User-Friendly Tool for Deploying Hadoop Clouds and Analyzing High-Throughput Sequencing Data with MapReduce. <i>PLoS ONE</i> , 2014, 9, e98146.	2.5	24
71	A clinical decision and support system with automatically ECG classification in telehealthcare. , 2014, , .		2
72	Processing and analysis of imbalanced liver cancer patient data by case-based reasoning. , 2014, , .		0

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73	In-Hospital and One-Year Mortality and Their Predictors in Patients Hospitalized for First-Ever Chronic Obstructive Pulmonary Disease Exacerbations: A Nationwide Population-Based Study. PLoS ONE, 2014, 9, e114866.	2.5	79
74	CHT cloud orchestration: An integrated cloud system of virtualization platform. , 2014, , .		1
75	Recurrence predictive models for patients with hepatocellular carcinoma after radiofrequency ablation using support vector machines with feature selection methods. Computer Methods and Programs in Biomedicine, 2014, 117, 425-434.	4.7	36
76	Improving inpatient fall prevention strategies using interactive data repository information system. Studies in Health Technology and Informatics, 2014, 201, 87-93.	0.3	1
77	FinancialCloud: Open Cloud Framework of Derivative Pricing. , 2013, , .		5
78	Ultra-fast Epileptic seizure detection using EMD based on multichannel electroencephalogram. , 2013, , .		7
79	A web-based telehealthcare system with mobile application and data analysis for diet people. , 2013, , .		1
80	An accurate power analysis model based on MAC layer for the DCF of 802.11n. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 2013, 36, 17-26.	1.1	1
81	Web-Based Newborn Screening System for Metabolic Diseases: Machine Learning Versus Clinicians. Journal of Medical Internet Research, 2013, 15, e98.	4.3	19
82	A Fast Power Estimation Method for Content Addressable Memory by Using SystemC Simulation Environment. IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, 2013, E96.A, 1723-1729.	0.3	0
83	A Web-based Medical Emergency Guiding System. , 2012, , .		2
84	E-Health and Healthcare Enterprise Information System Leveraging Service-Oriented Architecture. Telemedicine Journal and E-Health, 2012, 18, 205-212.	2.8	30
85	Newborn Screening for Phenylketonuria: Machine Learning vs Clinicians. , 2012, , .		1
86	The development of a real-time valuation service of financial derivatives. , 2012, , .		2
87	A Multiclass Classification Tool Using Cloud Computing Architecture. , 2012, , .		4
88	Continuous, personalized healthcare integrated platform. , 2012, , .		4
89	A Web-Based Multidrug-Resistant Organisms Surveillance and Outbreak Detection System with Rule-Based Classification and Clustering. Journal of Medical Internet Research, 2012, 14, e131.	4.3	10
90	An early design estimation approach to synthesize the low-power pre-computation-based content addressable memory. , 2011, , .		0

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91	Ubiquitous mobile personal health system based on cloud computing. , 2011, , .		5
92	Mobile nursing cart with software defined radio for healthcare enterprises. , 2011, , .		0
93	A secure electronic medical record sharing mechanism in the cloud computing platform. , 2011, , .		41
94	Epileptic Seizure Detection for Multichannel EEG Signals with Support Vector Machines. , 2011, , .		21
95	A priority based output arbiter for NoC router. , 2011, , .		9
96	Star-type architecture with low transmission latency for a 2D mesh NOC. , 2010, , .		10
97	Design of low latency on-chip communication based on hybrid NoC architecture. , 2010, , .		13
98	Discharge summary note based on service-oriented architecture. , 2010, , .		0
99	A web-based hospital-acquired infection surveillance information system. , 2010, , .		2
100	Distinguishable error detection method for Network on Chip. , 2010, , .		0
101	CAM puzzle: A power model and function-based circuit segment method of Content Addressable Memory. , 2010, , .		3
102	Leukemia cancer classification based on Support Vector Machine. , 2010, , .		8
103	A Newborn Screening System Based on Service-Oriented Architecture Embedded Support Vector Machine. , 2008, , .		1
104	Design and Analysis of Enhanced Grouping DCF Scheme for the MAC Layer Enhancement of 802.11n with Ultra-high Data Rate. , 2007, , .		9
105	A Preliminary Study of Medical Image Distributed Intelligent Access Integrated with Electronic Medical Records System for Brain Degenerative Disease. , 2007, , .		0
106	Design and Enhance a Dynamic Healthcare Portal Site. , 2007, , .		6
107	Middleware based Inpatient Healthcare Information System. , 2007, , .		23
108	Design and Enhance a Dynamic Healthcare Portal Site. , 2007, , .		0

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109	Mobile health information system integrated with voip technology in a wireless hospital. , 2006, , .		2
110	A Healthcare Pattern Collection for Rural Telemedicine Services. , 2006, , .		0
111	Threshold Signature Scheme Resistible for Conspiracy Attack. , 2006, , .		2
112	Location-aware healthcare in u-hospitals. , 2006, , .		0
113	A Functional Link Network With Higher Order Statistics for Signal Enhancement. IEEE Transactions on Signal Processing, 2006, 54, 4821-4826.	5.3	13
114	WLC34-5: GDCF: Grouping DCF for the MAC layer enhancement of 802.11. IEEE Global Telecommunications Conference (GLOBECOM), 2006, , .	0.0	1
115	Efficient Group Key Management Protocol with One-Way Key Derivation. , 2005, , .		20
116	Zero-aware asymmetric SRAM cell for reducing cache power in writing zero. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2004, 12, 827-836.	3.1	51
117	Design and analysis of low-power cache using two-level filter scheme. IEEE Transactions on Very Large Scale Integration (VLSI) Systems, 2003, 11, 568-580.	3.1	22
118	An implementation of public key cryptosystem TTM with linear time complexity for decryption. , 2003, , .		1
119	A bipartition-codec architecture to reduce power in pipelined circuits. IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems, 2001, 20, 343-348.	2.7	6
120	FACE: Fine-tuned Architecture Codesign Environment for ASIP Development. Design Automation for Embedded Systems, 1999, 4, 329-351.	1.0	2
121	Requirements specification and analysis of digital systems using fuzzy and marked Petri nets. IEEE Transactions on Systems, Man, and Cybernetics, 1998, 28, 748-754.	5.0	8
122	Efficient exploitation of instruction-level parallelism for superscalar processors by the conjugate register file scheme. IEEE Transactions on Computers, 1996, 45, 278-293.	3.4	5
123	The complementary relationship of interprocedural register allocation and inlining. International Journal of Parallel Programming, 1994, 22, 409-434.	1.5	3
124	A superscalar microarchitecture supporting aggressive instruction scheduling. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 1994, 17, 151-167.	1.1	0
125	Intelligent stock trading system with price trend prediction and reversal recognition using dual-module neural networks. Applied Intelligence, 1993, 3, 225-248.	5.3	20
126	A BIST ram architecture with parallel testing in a microprogram rom. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers, Series A/Chung-kuo Kung Ch'eng Hsueh K'an, 1993, 16, 685-690.	1.1	0



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127	Exploiting Instruction-level Parallelism With The Conjugate Register File Scheme. , 0, , .		1
128	Reducing procedure call overhead: optimizing register usage at procedure calls. , 0, , .		2
129	A simple tree pattern matching algorithm for code generator. , 0, , .		2
130	Adsmith: an efficient object-based distributed shared memory system on PVM. , 0, , .		4
131	Fast block motion estimation using adaptive simulated annealing. , 0, , .		1
132	Unified fully-pipelined VLSI implementations of two-dimensional discrete trigonometric transforms. , 0, , .		1
133	Hybrid parallel circuit simulation approaches. , 0, , .		0
134	Synthesis of partition-codec architecture for low power and small area circuit design. , 0, , .		0
135	An entropy-based algorithm to reduce area overhead for bipartition-codec architecture. , 0, , .		1
136	A constant size rekeying message framework for secure multicasting. , 0, , .		2
137	Cache design for eliminating the address translation bottleneck and reducing the tag area cost. , 0, , .		1
138	A distributed key management protocol for dynamic groups. , 0, , .		0
139	E-Vanguard for Emergency - a wireless system for rescue and healthcare. , 0, , .		2
140	Designing platform-based system power management on a smart tablet appliance. , 0, , .		3
141	A design of small-area automatic wheelchair. , 0, , .		4
142	Optimizing centralized secure group communications with binary key tree recomposition. , 0, , .		1
143	A Web Redirection Service for Variant Chinese Domain Name Resolution. , 0, , .		0
144	Mobile health information system integrated with voip technology in a wireless hospital. , 0, , .		0

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145	Location-aware healthcare in u-hospitals. , 0, , .		0
146	A Healthcare Pattern Collection for Rural Telemedicine Services. , 0, , .		0
147	DNA mixture interpretation using linear regression and neural networks on massively parallel sequencing data of single nucleotide polymorphisms. Australian Journal of Forensic Sciences, 0, , 1-13.	1.2	2
148	An effective output-oriented algorithm for low power multipartition architecture. , 0, , .		4