

# Ravishankar K Iyer

## List of Publications by Year in descending order

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Version: 2024-02-01

35  
papers

1,989  
citations

687363

13  
h-index

580821

25  
g-index

37  
all docs

37  
docs citations

37  
times ranked

3315  
citing authors

#	ARTICLE	IF	CITATIONS
1	Big Data: Astronomical or Genomical?. PLoS Biology, 2015, 13, e1002195.	5.6	995
2	Lessons Learned from the Analysis of System Failures at Petascale: The Case of Blue Waters. , 2014, , .		145
3	Software-Defined Networking for Smart Grid Resilience. , 2015, , .		117
4	Pharmacogenomics-Driven Prediction of Antidepressant Treatment Outcomes: A Machine Learning Approach With Multi-Trial Replication. Clinical Pharmacology and Therapeutics, 2019, 106, 855-865.	4.7	69
5	Runtime Semantic Security Analysis to Detect and Mitigate Control-Related Attacks in Power Grids. IEEE Transactions on Smart Grid, 2018, 9, 163-178.	9.0	68
6	Beta-defensin 1, aryl hydrocarbon receptor and plasma kynurenine in major depressive disorder: metabolomics-informed genomics. Translational Psychiatry, 2018, 8, 10.	4.8	59
7	Simulating Next-Generation Sequencing Datasets from Empirical Mutation and Sequencing Models. PLoS ONE, 2016, 11, e0167047.	2.5	59
8	Predicting Short-term MCI-to-AD Progression Using Imaging, CSF, Genetic Factors, Cognitive Resilience, and Demographics. Scientific Reports, 2019, 9, 2235.	3.3	51
9	Measuring and Understanding Extreme-Scale Application Resilience: A Field Study of 5,000,000 HPC Application Runs. , 2015, , .		45
10	AVFI: Fault Injection for Autonomous Vehicles. , 2018, , .		43
11	Seizure Forecasting and the Preictal State in Canine Epilepsy. International Journal of Neural Systems, 2017, 27, 1650046.	5.2	40
12	F-DETA: A Framework for Detecting Electricity Theft Attacks in Smart Grids. , 2016, , .		34
13	Augmentation of Physician Assessments with Multi-Omics Enhances Predictability of Drug Response: A Case Study of Major Depressive Disorder. IEEE Computational Intelligence Magazine, 2018, 13, 20-31.	3.2	34
14	Recommendations for performance optimizations when using GATK3.8 and GATK4. BMC Bioinformatics, 2019, 20, 557.	2.6	25
15	ASAP: Accelerated Short-Read Alignment on Programmable Hardware. IEEE Transactions on Computers, 2019, 68, 331-346.	3.4	21
16	A Performance Evaluation of Sequence Alignment Software in Virtualized Environments. , 2014, , .		19
17	Low Predictability of Readmissions and Death Using Machine Learning in Cirrhosis. American Journal of Gastroenterology, 2021, 116, 336-346.	0.4	17
18	LogDiver. , 2015, , .		16

#	ARTICLE	IF	CITATIONS
19	RAINCOAT: Randomization of Network Communication in Power Grid Cyber Infrastructure to Mislead Attackers. IEEE Transactions on Smart Grid, 2019, 10, 4893-4906.	9.0	16
20	Model-based unsupervised learning informs metformin-induced cell-migration inhibition through an AMPK-independent mechanism in breast cancer. Oncotarget, 2017, 8, 27199-27215.	1.8	15
21	Prediction of short-term antidepressant response using probabilistic graphical models with replication across multiple drugs and treatment settings. Neuropsychopharmacology, 2021, 46, 1272-1282.	5.4	14
22	Stool microbiota are superior to saliva in distinguishing cirrhosis and hepatic encephalopathy using machine learning. Journal of Hepatology, 2022, 76, 600-607.	3.7	12
23	Resiliency of HPC Interconnects: A Case Study of Interconnect Failures and Recovery in Blue Waters. IEEE Transactions on Dependable and Secure Computing, 2018, 15, 915-930.	5.4	10
24	Sex is associated with differences in gut microbial composition and function in hepatic encephalopathy. Journal of Hepatology, 2021, 74, 80-88.	3.7	10
25	Deep learning identifies brain structures that predict cognition and explain heterogeneity in cognitive aging. NeuroImage, 2022, 251, 119020.	4.2	9
26	Machine Learning Helps Identify New Drug Mechanisms in Triple-Negative Breast Cancer. IEEE Transactions on Nanobioscience, 2018, 17, 251-259.	3.3	8
27	The Mystery of the Failing Jobs: Insights from Operational Data from Two University-Wide Computing Systems. , 2020, , .		8
28	Challenges and Opportunities in the Detection of Safety-Critical Cyberphysical Attacks. Computer, 2020, 53, 26-37.	1.1	7
29	Inter-ictal Seizure Onset Zone localization using unsupervised clustering and Bayesian Filtering. , 2017, , .		5
30	PB-MotifA Method for Identifying Gene/Pseudogene Rearrangements With Long Reads: An Application to CYP21A2 Genotyping. Frontiers in Genetics, 2021, 12, 716586.	2.3	5
31	Unsupervised single-cell analysis in triple-negative breast cancer: A case study. , 2016, , .		4
32	Exogene: A performant workflow for detecting viral integrations from paired-end next-generation sequencing data. PLoS ONE, 2021, 16, e0250915.	2.5	3
33	Data-Driven Application-Oriented Reliability Model of a High-Performance Computing System. IEEE Transactions on Reliability, 2022, 71, 603-615.	4.6	2
34	Telogator: a method for reporting chromosome-specific telomere lengths from long reads. Bioinformatics, 2022, 38, 1788-1793.	4.1	2
35	Impact of Malicious SCADA Commands on Power Gridsâ€™ Dynamic Responses. , 2018, , .		1