Vijayalakshmi Atluri

List of Publications by Year
in descending order

183 papers	3,833 citations	304602 22 h-index	243529 44 g-index
200 all docs	200 docs citations	200 times ranked	1428 citing authors

#	Article	IF	Citations
1	Enabling Attribute-Based Access Control in Linux Kernel. , 2022, , .		0
2	Contemporaneous Update and Enforcement of ABAC Policies. , 2022, , .		0
3	Enabling Workforce Optimization in Constrained Attribute-Based Access Control Systems. IEEE Transactions on Emerging Topics in Computing, 2021, 9, 1901-1913.	3.2	5
4	Optimal Employee Recruitment in Organizations under Attribute-Based Access Control. ACM Transactions on Management Information Systems, 2021, 12, 1-24.	2.1	2
5	Incremental Maintenance of ABAC Policies. , 2021, 2021, 185-196.		5
6	Attribute-Based Access Control for NoSQL Databases. , 2021, , .		9
7	Analyzing social media messages of public sector organizations utilizing sentiment analysis and topic modeling. Information Polity, 2021, 26, 375-390.	0.5	1
8	Security Analysis of Unified Access Control Policies. Communications in Computer and Information Science, 2020, , 126-146.	0.4	6
9	Location-based Sentiment Analyses and Visualization of Twitter Election Data. Digital Government Research and Practice (DGOV), 2020, 1, 1-19.	1.2	24
10	Security, Privacy and Trust for Responsible Innovations and Governance. , 2020, , .		1
11	Developing Machine Learning Models to Automate News Classification. , 2020, , .		3
12	Visual Analytics for Global Migration Policy Discovery and NGO Collaboration. , 2020, , .		0
13	Algorithms and Applications to Weighted Rank-one Binary Matrix Factorization. ACM Transactions on Management Information Systems, 2020, 11, 1-33.	2.1	9
14	Deploying ABAC policies using RBAC systems. Journal of Computer Security, 2019, 27, 483-506.	0.5	11
15	Crime Prediction Model using Deep Neural Networks. , 2019, , .		23
16	Social Media Communication of Public Sector Organizations. , 2019, , .		0
17	Policy Adaptation in Hierarchical Attribute-based Access Control Systems. ACM Transactions on Internet Technology, 2019, 19, 1-24.	3.0	6
18	Managing attribute-based access control policies in a unified framework using data warehousing and in-memory database. Computers and Security, 2019, 86, 183-205.	4.0	18

#	Article	IF	Citations
19	PolTree. , 2019, 2019, 25-35.		10
20	Security analysis of ABAC under an administrative model. IET Information Security, 2019, 13, 96-103.	1.1	11
21	ABACaaS. , 2019, , .		6
22	Central Attribute Authority (CAA): A Vision for Seamless Sharing of Organizational Resources. , 2019, , .		2
23	Policy Reconciliation and Migration in Attribute Based Access Control. Lecture Notes in Computer Science, 2019, , 99-120.	1.0	1
24	PEER. , 2019, , 541-559.		0
25	VisMAP: Visual Mining of Attribute-Based Access Control Policies. Lecture Notes in Computer Science, 2019, , 79-98.	1.0	3
26	Citizen-to-Citizen Resource Sharing in Emergency Response. , 2019, , 578-605.		0
27	Specification and Verification of Separation of Duty Constraints in Attribute-Based Access Control. IEEE Transactions on Information Forensics and Security, 2018, 13, 897-911.	4.5	26
28	Towards designing robust CAPTCHAs. Journal of Computer Security, 2018, 26, 731-760.	0.5	1
29	A side-channel attack on smartphones: Deciphering key taps using built-in microphones. Journal of Computer Security, 2018, 26, 255-281.	0.5	8
30	HyPE: A Hybrid Approach toward Policy Engineering in Attribute-Based Access Control. IEEE Letters of the Computer Society, 2018, 1, 25-29.	1.1	8
31	Using Gini Impurity to Mine Attribute-based Access Control Policies with Environment Attributes. , 2018, 2018, 213-215.		6
32	Policy Engineering in RBAC and ABAC. Lecture Notes in Computer Science, 2018, , 24-54.	1.0	15
33	Enabling the Deployment of ABAC Policies in RBAC Systems. Lecture Notes in Computer Science, 2018, 10980, 51-68.	1.0	7
34	Analysis and visualization of subjectivity and polarity of Twitter location data. , 2018, , .		13
35	Web-based application for sentiment analysis of live tweets. , 2018, , .		17
36	Citizen-to-Citizen Resource Sharing in Emergency Response. Advances in Civil and Industrial Engineering Book Series, 2018, , 130-164.	0.2	1

#	Article	IF	Citations
37	On Optimal Employee Assignment in Constrained Role-Based Access Control Systems. ACM Transactions on Management Information Systems, 2017, 7, 1-24.	2.1	10
38	Migrating from RBAC to temporal RBAC. IET Information Security, 2017, 11, 294-300.	1.1	24
39	Analysis of political discourse on twitter in the context of the 2016 US presidential elections. Government Information Quarterly, 2017, 34, 613-626.	4.0	115
40	Sentiment based Analysis of Tweets during the US Presidential Elections. , 2017, , .		29
41	Policy Adaptation in Attribute-Based Access Control for Inter-Organizational Collaboration. , 2017, , .		5
42	Efficient Bottom-Up Mining of Attribute Based Access Control Policies. , 2017, 2017, 339-348.		17
43	Preventing Unauthorized Data Flows. Lecture Notes in Computer Science, 2017, , 41-62.	1.0	1
44	Security Models, Geospatial. , 2017, , 1850-1860.		0
45	Geospatial Authorizations, Efficient Enforcement. , 2017, , 730-738.		0
46	Using classification for role-based access control management. International Journal of Technology, Policy and Management, 2016, 16, 45.	0.1	2
47	Efficient Evaluation of Authorizations for Video Data. , 2016, , .		0
48	An Administrative Model for Collaborative Management of ABAC Systems and Its Security Analysis. , 2016, , .		6
49	Deciphering Text from Touchscreen Key Taps. Lecture Notes in Computer Science, 2016, , 3-18.	1.0	6
50	Mining temporal roles using many-valued concepts. Computers and Security, 2016, 60, 79-94.	4.0	16
51	A Survey of Role Mining. ACM Computing Surveys, 2016, 48, 1-37.	16.1	70
52	Security Models, Geospatial. , 2016, , 1-11.		0
53	PEER. International Journal of E-Planning Research, 2015, 4, 29-46.	3.0	7
54	Managing Multi-dimensional Multi-granular Security Policies Using Data Warehousing. Lecture Notes in Computer Science, 2015, , 221-235.	1.0	5

#	Article	IF	Citations
55	Generating Secure Images for CAPTCHAs through Noise Addition. , 2015, , .		2
56	The generalized temporal role mining problem. Journal of Computer Security, 2015, 23, 31-58.	0.5	17
57	Statistical Database Auditing Without Query Denial Threat. INFORMS Journal on Computing, 2015, 27, 20-34.	1.0	4
58	Meeting Cardinality Constraints in Role Mining. IEEE Transactions on Dependable and Secure Computing, 2015, 12, 71-84.	3.7	26
59	Migrating from DAC to RBAC. Lecture Notes in Computer Science, 2015, , 69-84.	1.0	5
60	Role Mining in the Presence of Separation of Duty Constraints. Lecture Notes in Computer Science, 2015, , 98-117.	1.0	4
61	Minimizing Organizational User Requirement while Meeting Security Constraints. ACM Transactions on Management Information Systems, 2015, 6, 1-25.	2.1	7
62	Security analysis for temporal role based access control. Journal of Computer Security, 2014, 22, 961-996.	0.5	15
63	Utilizing social media to improve local government responsiveness. , 2014, , .		15
64	Security analysis of temporal RBAC under an administrative model. Computers and Security, 2014, 46, 154-172.	4.0	14
65	An optimization framework for role mining. Journal of Computer Security, 2014, 22, 1-31.	0.5	22
66	Enhancing the government service experience through QR codes on mobile platforms. Government Information Quarterly, 2014, 31, 6-16.	4.0	35
67	Temporal RBAC Security Analysis Using Logic Programming in the Presence of Administrative Policies. Lecture Notes in Computer Science, 2014, , 129-148.	1.0	3
68	AMTRAC: An administrative model for temporal role-based access control. Computers and Security, 2013, 39, 201-218.	4.0	12
69	Panel on granularity in access control. , 2013, , .		1
70	Community based emergency response. , 2013, , .		8
71	Analysis of TRBAC with Dynamic Temporal Role Hierarchies. Lecture Notes in Computer Science, 2013, , 297-304.	1.0	4
72	Toward Mining of Temporal Roles. Lecture Notes in Computer Science, 2013, , 65-80.	1.0	18

#	Article	IF	Citations
73	Policy Mining: A Bottom-Up Approach toward a Model Based Firewall Management. Lecture Notes in Computer Science, 2013, , 133-147.	1.0	3
74	An Administrative Model for Spatio-Temporal Role Based Access Control. Lecture Notes in Computer Science, 2013, , 375-389.	1.0	8
75	Risk Based Access Control Using Classification. , 2013, , 79-95.		1
76	Using QR codes for enhancing the scope of digital government services. , 2012, , .		8
77	Analyzing temporal role based access control models. , 2012, , .		29
78	Role engineering. , 2012, , .		12
79	Constraint-Aware Role Mining Via Extended Boolean Matrix Decomposition. IEEE Transactions on Dependable and Secure Computing, 2012, , .	3.7	23
80	Resource sharing using UICDSâ„¢ framework for incident management. Transforming Government: People, Process and Policy, 2012, 6, 41-61.	1.3	10
81	Structure-aware graph anonymization. Web Intelligence and Agent Systems, 2012, 10, 193-208.	0.4	0
82	Role Mining under Role-Usage Cardinality Constraint. International Federation for Information Processing, 2012, , 150-161.	0.4	17
83	Privacy-Preserving Subgraph Discovery. Lecture Notes in Computer Science, 2012, , 161-176.	1.0	7
84	Attacking Image Based CAPTCHAs Using Image Recognition Techniques. Lecture Notes in Computer Science, 2012, , 327-342.	1.0	7
85	A profile anonymization model for location-based services. Journal of Computer Security, 2011, 19, 795-833.	0.5	12
86	Security analysis of GTRBAC and its variants using model checking. Computers and Security, 2011, 30, 128-147.	4.0	14
87	The Policy Machine: A novel architecture and framework for access control policy specification and enforcement. Journal of Systems Architecture, 2011, 57, 412-424.	2.5	67
88	UICDS-based information sharing among emergency response application systems. , 2011, , .		3
89	Efficiently enforcing spatiotemporal access control under uncertain location information. Journal of Computer Security, 2011, 19, 607-637.	0.5	1
90	An Optimization Model for the Extended Role Mining Problem. Lecture Notes in Computer Science, 2011, , 76-89.	1.0	7

#	Article	IF	Citations
91	Weighted Rank-One Binary Matrix Factorization. , 2011, , .		13
92	Semantics-aware security policy specification for the semantic web data. International Journal of Information and Computer Security, 2010, 4, 52.	0.2	5
93	A unified index structure for efficient enforcement of spatiotemporal authorisations. International Journal of Information and Computer Security, 2010, 4, 118.	0.2	2
94	Spatial neighborhood based anomaly detection in sensor datasets. Data Mining and Knowledge Discovery, 2010, 20, 221-258.	2.4	20
95	Anonymization models for directional location based service environments. Computers and Security, 2010, 29, 59-73.	4.0	8
96	Role Engineering via Prioritized Subset Enumeration. IEEE Transactions on Dependable and Secure Computing, 2010, 7, 300-314.	3.7	39
97	The role mining problem. ACM Transactions on Information and System Security, 2010, 13, 1-31.	4.5	57
98	Privacy-preserving trust verification. , 2010, , .		2
99	Ensuring Privacy and Security for LBS through Trajectory Partitioning. , 2010, , .		18
100	Information sharing infrastructure for pharmaceutical supply chain management in emergency response. , 2010, , .		0
101	An efficient online auditing approach to limit private data disclosure. , 2009, , .		3
102	Effective anonymization of query logs. , 2009, , .		33
103	Edge-RMP: Minimizing administrative assignments for role-based access control. Journal of Computer Security, 2009, 17, 211-235.	0.5	27
104	Spatial outlier detection in heterogeneous neighborhoods. Intelligent Data Analysis, 2009, 13, 85-107.	0.4	12
105	Object discovery in high-resolution remote sensing images: a semantic perspective. Knowledge and Information Systems, 2009, 19, 211-233.	2.1	22
106	Evaluating the validity of data instances against ontology evolution over the Semantic Web. Information and Software Technology, 2009, 51, 83-97.	3.0	25
107	Extended Boolean Matrix Decomposition. , 2009, , .		13
108	Preserving Privacy in Social Networks: A Structure-Aware Approach. , 2009, , .		26

#	Article	IF	Citations
109	Towards formal security analysis of GTRBAC using timed automata. , 2009, , .		20
110	Spatiotemporal Access Control Enforcement under Uncertain Location Estimates. Lecture Notes in Computer Science, 2009, , 159-174.	1.0	8
111	A Profile Anonymization Model for Privacy in a Personalized Location Based Service Environment. , 2008, , .		25
112	Optimal Boolean Matrix Decomposition: Application to Role Engineering. , 2008, , .		112
113	The Role Hierarchy Mining Problem: Discovery of Optimal Role Hierarchies. , 2008, , .		44
114	Random Walks to Identify Anomalous Free-Form Spatial Scan Windows. IEEE Transactions on Knowledge and Data Engineering, 2008, 20, 1378-1392.	4.0	21
115	A meta model for access control. , 2008, , .		18
116	Efficient security policy enforcement for the mobile environment. Journal of Computer Security, 2008, 16, 439-475.	0.5	9
117	Migrating to optimal RBAC with minimal perturbation. , 2008, , .		55
118	Panel on role engineering. , 2008, , .		3
119	Security for Workflow Systems. , 2008, , 213-230.		22
120	Security Models, Geospatial. , 2008, , 1028-1036.		0
121	Geospatial Authorizations, Efficient Enforcement. , 2008, , 379-385.		0
122	The role mining problem. , 2007, , .		206
123	A geotemporal role-based authorisation system. International Journal of Information and Computer Security, 2007, 1, 143.	0.2	35
124	Using semantics for automatic enforcement of access control policies among dynamic coalitions. , 2007, , .		19
125	A decentralized execution model forÂinter-organizational workflows. Distributed and Parallel Databases, 2007, 22, 55-83.	1.0	20
126	Semantic Feature Selection for Object Discovery in High-Resolution Remote Sensing Imagery. , 2007, , 71-83.		6

#	Article	IF	Citations
127	Efficient Security Policy Enforcement in a Location Based Service Environment. Lecture Notes in Computer Science, 2007, , 61-76.	1.0	14
128	Chapter 14 Government Agency Interoperation in Security Applications. Handbooks in Information Systems, 2007, , 323-347.	0.5	0
129	Privacy, Profiling, Targeted Marketing, and Data Mining. , 2007, , 117-131.		0
130	Privacy-preserving semantic interoperation and access control of heterogeneous databases. , 2006, , .		23
131	SemDiff. International Journal on Semantic Web and Information Systems, 2006, 2, 1-32.	2.2	7
132	Secure interoperation for effective data mining in border control and homeland security applications. , 2006, , .		4
133	Constituent-centric municipal government coalition portal. , 2006, , .		0
134	Challenges in eGovernment technology transfer. , 2006, , .		0
135	RoleMiner. , 2006, , .		137
136	Inter-instance authorization constraints for secure workflow management. , 2006, , .		42
137	Semantically enhanced enforcement of mobile consumer's privacy preferences. , 2006, , .		1
138	An Ontology-Guided Approach to Change Detection of the Semantic Web Data. Lecture Notes in Computer Science, 2006, , 130-157.	1.0	2
139	A Distributed Coalition Service Registry for Ad-Hoc Dynamic Coalitions: A Service-Oriented Approach. Lecture Notes in Computer Science, 2006, , 209-223.	1.0	4
140	Efficient Enforcement of Security Policies Based on Tracking of Mobile Users. Lecture Notes in Computer Science, 2006, , 237-251.	1.0	14
141	Cascaded Star: A Hyper-Dimensional Model for a Data Warehouse. Lecture Notes in Computer Science, 2006, , 439-448.	1.0	3
142	Preview: Optimizing View Materialization Cost in Spatial Data Warehouses. Lecture Notes in Computer Science, 2006, , 45-54.	1.0	0
143	Using Semantics for Policy-Based Web Service Composition. Distributed and Parallel Databases, 2005, 18, 37-64.	1.0	27
144	Collusion Set Detection Through Outlier Discovery. Lecture Notes in Computer Science, 2005, , 1-13.	1.0	7

#	Article	IF	Citations
145	LS3. , 2005, , .		14
146	Preserving mobile customer privacy. , 2005, , .		41
147	Supporting conditional delegation in secure workflow management systems. , 2005, , .		63
148	Selective View Materialization in a Spatial Data Warehouse. Lecture Notes in Computer Science, 2005, , 157-167.	1.0	3
149	A Credential-Based Approach for Facilitating Automatic Resource Sharing Among Ad-Hoc Dynamic Coalitions. Lecture Notes in Computer Science, 2005, , 252-266.	1.0	12
150	Unified Index for Mobile Object Data and Authorizations. Lecture Notes in Computer Science, 2005, , 80-97.	1.0	13
151	An Attribute Graph Based Approach to Map Local Access Control Policies to Credential Based Access Control Policies. Lecture Notes in Computer Science, 2005, , 134-147.	1.0	5
152	Chinese wall security for decentralized workflow management systems*. Journal of Computer Security, 2004, 12, 799-840.	0.5	15
153	Star-Tree: An Index Structure for Efficient Evaluation of Spatiotemporal Authorizations. , 2004, , 31-47.		8
154	Neighborhood based detection of anomalies in high dimensional spatio-temporal sensor datasets. , 2004, , .		48
155	Editors'€™ message for the special issue on security. International Journal on Digital Libraries, 2004, 4, 137-138.	1.1	2
156	Supporting Delegation in Secure Workflow Management Systems. International Federation for Information Processing, 2004, , 190-202.	0.4	9
157	Ontology-Guided Change Detection to the Semantic Web Data. Lecture Notes in Computer Science, 2004, , 624-638.	1.0	6
158	Automatic Enforcement of Access Control Policies Among Dynamic Coalitions. Lecture Notes in Computer Science, 2004, , 369-378.	1.0	17
159	Concept-level access control for the Semantic Web. , 2003, , .		61
160	Self-manifestation of composite multimedia objects to satisfy security constraints. , 2003, , .		6
161	An Access Scheduling Tree to Achieve Optimal Freshness in Local Repositories. Lecture Notes in Computer Science, 2003, , 227-236.	1.0	4
162	Handling Dynamic Changes in Decentralized Workflow Execution Environments. Lecture Notes in Computer Science, 2003, , 813-825.	1.0	8

#	Article	IF	Citations
163	Uniform Indexing for Geospatial Data and Authorizations. IFIP Advances in Information and Communication Technology, 2003, , 207-218.	0.5	7
164	An authorization model for temporal and derived data. ACM Transactions on Information and System Security, 2002, 5, 62-94.	4.5	50
165	Automating the Delivery of Governmental Business Services Through Workflow Technology. The Kluwer International Series on Advances in Database Systems, 2002, , 69-84.	1.1	1
166	Protecting Privacy from Continuous High-Resolution Satellite Surveillance. International Federation for Information Processing, 2002, , 233-244.	0.4	4
167	Multilevel secure transaction processing1. Journal of Computer Security, 2001, 9, 165-195.	0.5	5
168	Security for Workflow Systems. Information Security Technical Report, 2001, 6, 59-68.	1.3	32
169	A Chinese wall security model for decentralized workflow systems. , 2001, , .		54
170	Customized geospatial workflows for e-government services. , 2001, , .		6
171	A Petri net based safety analysis of workflow authorization models1. Journal of Computer Security, 2000, 8, 209-240.	0.5	41
172	A semantic-based execution model for multilevel secure workflows. Journal of Computer Security, 2000, 8, 3-41.	0.5	23
173	SI in digital libraries. Communications of the ACM, 2000, 43, 64-72.	3.3	23
174	An authorization model for temporal data. , 2000, , .		28
175	The specification and enforcement of authorization constraints in workflow management systems. ACM Transactions on Information and System Security, 1999, 2, 65-104.	4.5	444
176	Analyzing the Safety of Workflow Authorization Models. , 1999, , 43-57.		11
177	Modeling and Analysis of Workflows Using Petri Nets. Journal of Intelligent Information Systems, 1998, 10, 131-158.	2.8	232
178	A flexible model supporting the specification and enforcement of role-based authorization in workflow management systems. , 1997, , .		63
179	Enforcing mandatory and discretionary security in workflow management systems*. Journal of Computer Security, 1997, 5, 303-339.	0.5	23
180	A theoretical formulation for degrees of isolation in databases. Information and Software Technology, 1997, 39, 47-53.	3.0	6

#	Article	IF	Citations
181	An authorization model for workflows. Lecture Notes in Computer Science, 1996, , 44-64.	1.0	109
182	Achieving Stricter Correctness Requirements in Multilevel Secure Database Management Systems*. Journal of Computer Security, 1993, 2, 311-351.	0.5	1
183	A Role-Based Administrative Model for Administration of Heterogeneous Access Control Policies and its Security Analysis. Information Systems Frontiers, 0, , 1.	4.1	6