

# Dharmaraja Selvamuthu

## List of Publications by Year in descending order

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Version: 2024-02-01

88  
papers

1,010  
citations

516215

16  
h-index

552369

26  
g-index

89  
all docs

89  
docs citations

89  
times ranked

645  
citing authors

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Indian stock market prediction using artificial neural networks on tick data. Financial Innovation, 2019, 5, .  | 3.6 | 147       |
| 2  | Analytic modeling of handoffs in wireless cellular networks. Information Sciences, 2002, 148, 155-166.  | 4.0 | 58        |
| 3  | WHOP: Wormhole attack detection protocol using hound packet. , 2011, , .  |     | 44        |
| 4  | Performance modeling of wireless networks with generally distributed handoff interarrival times. Computer Communications, 2003, 26, 1747-1755.                                      | 3.1 | 43        |
| 5  | Reliability and Survivability Analysis for UMTS Networks: An Analytical Approach. IEEE Transactions on Network and Service Management, 2008, 5, 132-142.                            | 3.2 | 42        |
| 6  | Reliability and survivability of vehicular ad hoc networks: An analytical approach. Reliability Engineering and System Safety, 2016, 153, 28-38.                                    | 5.1 | 40        |
| 7  | A Continuous-Time Ehrenfest Model with Catastrophes and Its Jump-Diffusion Approximation. Journal of Statistical Physics, 2015, 161, 326-345.                                       | 0.5 | 39        |
| 8  | Combined Guard Channel and Mobile-Assisted Handoff for Cellular Networks. IEEE Transactions on Vehicular Technology, 2008, 57, 502-510.   | 3.9 | 35        |
| 9  | Performance analysis of IEEE 802.11 DCF with stochastic reward nets. International Journal of Communication Systems, 2007, 20, 273-296.   | 1.6 | 33        |
| 10 | Introduction to Statistical Methods, Design of Experiments and Statistical Quality Control. , 2018, , .   |     | 29        |
| 11 | Performability modelling of wireless communication systems. International Journal of Communication Systems, 2003, 16, 561-577.  | 1.6 | 26        |
| 12 | Semi-Markov modeling of dependability of VoIP network in the presence of resource degradation and security attacks. Reliability Engineering and System Safety, 2011, 96, 1627-1636. | 5.1 | 26        |
| 13 | Transient analysis of a two-heterogeneous servers queue with system disaster, server repair and customersâ€™ impatience. Top, 2017, 25, 179-205.                                    | 1.1 | 23        |
| 14 | Analysis of inspection-based preventive maintenance in operational software systems. , 0, , .   |     | 22        |
| 15 | Transient solution of a Markovian queuing model with heterogeneous servers and catastrophes. Opsearch, 2015, 52, 810-826.   | 1.1 | 22        |
| 16 | Transient analysis of M/M/1 queue with working vacation, heterogeneous service and customersâ€™ impatience. RAIRO - Operations Research, 2017, 51, 591-606.                         | 1.0 | 20        |
| 17 | Feasibility assessment of renewable energy resources for tea plantation and industry in India - A review. Renewable and Sustainable Energy Reviews, 2021, 145, 111083.              | 8.2 | 20        |
| 18 | A fluid queue modulated by two independent birthâ€“death processes. Computers and Mathematics With Applications, 2010, 60, 2433-2444.   | 1.4 | 19        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Analytical modeling of bidirectional multi-channel IEEE 802.11 MAC protocols. International Journal of Communication Systems, 2011, 24, 647-665.  | 1.6 | 17        |
| 20 | Transient Solution of a two-processor heterogeneous systems. Mathematical and Computer Modelling, 2000, 32, 1117-1123.  | 2.0 | 16        |
| 21 | Reliability and availability analysis for the JPL Remote Exploration and Experimentation System. , 0, , .   |     | 16        |
| 22 | BAAP: Blackhole attack avoidance protocol for wireless network. , 2011, , .   |     | 16        |
| 23 | Phase-type models for cellular networks supporting voice, video and data traffic. Mathematical and Computer Modelling, 2008, 47, 1167-1180.   | 2.0 | 13        |
| 24 | Markov regenerative credit rating model. Journal of Risk Finance, 2017, 18, 311-325.  | 3.6 | 13        |
| 25 | Empirical Analysis for Crop Yield Forecasting in India. Agricultural Research, 2020, 9, 132-138.  | 0.9 | 13        |
| 26 | Performance analysis of DRX mechanism using batch arrival vacation queueing system with N-policy in LTE-A networks. Annales Des Telecommunications/Annals of Telecommunications, 2020, 75, 353-367. | 1.6 | 12        |
| 27 | Analytical modeling of TCP flow in wireless LANs. Mathematical and Computer Modelling, 2011, 53, 684-693.   | 2.0 | 10        |
| 28 | Reducing session establishment delay using timed out packets in SIP signaling network. International Journal of Communication Systems, 2016, 29, 262-276.   | 1.6 | 9         |
| 29 | An analytical model driven by fluid queue for battery life time of a user equipment in LTE-A networks. Physical Communication, 2018, 30, 213-219.   | 1.2 | 8         |
| 30 | Analysis of Single Server Queue with Modified Vacation Policy. Methodology and Computing in Applied Probability, 2020, 22, 511-553.   | 0.7 | 8         |
| 31 | Selection of DRX scheme for voice traffic in LTE-A networks: Markov modeling and performance analysis. Journal of Industrial and Management Optimization, 2019, 15, 739-756.                        | 0.8 | 8         |
| 32 | Stochastic modeling for delay analysis of a VoIP network. Annals of Operations Research, 2015, 233, 171-180.  | 2.6 | 7         |
| 33 | A mathematical model for supply chain management of blood banks in India. Opsearch, 2020, 57, 541-552.  | 1.1 | 7         |
| 34 | Reliability and performance modelling of VoIP system with multiple component failures. International Journal of Reliability and Safety, 2013, 7, 58.  | 0.2 | 6         |
| 35 | On the study of simultaneous service by random number of servers with retrial and preemptive priority. International Journal of Operational Research, 2014, 20, 68.                                 | 0.1 | 6         |
| 36 | Portfolio optimization of credit risky bonds: a semi-Markov process approach. Financial Innovation, 2020, 6, .  | 3.6 | 6         |

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|----|--|-----|-----------|
| 37 | Analysis of energy saving in user equipment in LTE-A using stochastic modelling. Telecommunication Systems, 2022, 80, 123-140.   | 1.6 | 6         |
| 38 | Transient solution of a link with finite capacity supporting multiple streams. Performance Evaluation, 2001, 43, 1-14.   | 0.9 | 5         |
| 39 | Analytical modeling of Transmission Control Protocol NewReno using Generalized Stochastic Petri Nets. International Journal of Communication Systems, 2014, 27, 4185-4198.                       | 1.6 | 5         |
| 40 | Performance analysis of SIP signaling network using hierarchical modeling. , 2014, , .   |     | 5         |
| 41 | Perception based performance analysis of higher education institutions: a soft computing approach. Soft Computing, 2020, 24, 513-521.  | 2.1 | 5         |
| 42 | The transient solution of a local-jump heterogeneous chain of diatomic systems. Journal of Physics A, 1998, 31, 6579-6588.   | 1.6 | 4         |
| 43 | Markov chain models and applications. , 2015, , 393-421.   |     | 4         |
| 44 | Analysis of energy efficiency in cloud based heterogeneous RAN with large-scale antenna systems. Computer Networks, 2019, 149, 265-276.  | 3.2 | 4         |
| 45 | Scenario generation in stochastic programming using principal component analysis based on moment-matching approach. Opsearch, 2020, 57, 190-201.   | 1.1 | 4         |
| 46 | On the Computation of Some Interval Reliability Indicators for Semi-Markov Systems. Mathematics, 2021, 9, 575.   | 1.1 | 4         |
| 47 | Valuation of equity-indexed annuities under correlated jump-diffusion processes. Journal of Computational and Applied Mathematics, 2021, 395, 113575.  | 1.1 | 4         |
| 48 | Transient solution of multiprocessor systems with state-dependent arrivals. International Journal of Computer Mathematics, 2000, 73, 313-320.  | 1.0 | 3         |
| 49 | Performance analysis of multi-party conferencing in IMS using vacation queues. , 2014, , .   |     | 3         |
| 50 | On the exact transient solution of fluid queue driven by a birth death process with specific rational rates and absorption. Opsearch, 2015, 52, 746-755.   | 1.1 | 3         |
| 51 | Markov Chain Model with Catastrophe to Determine Mean Time to Default of Credit Risky Assets. Journal of Statistical Physics, 2017, 169, 876-888.  | 0.5 | 3         |
| 52 | A review of non-Markovian models for the dynamics of credit ratings. Reports on Economics and Finance, 2019, 5, 15-33.   | 0.5 | 3         |
| 53 | Optimal portfolio trading subject to stochastic dominance constraints under second-order autoregressive price dynamics. International Transactions in Operational Research, 2020, 27, 1771-1803. | 1.8 | 3         |
| 54 | Steady state analysis of fluid queues driven by birth death processes with rational rates. International Journal of Operational Research, 2020, 37, 562.   | 0.1 | 3         |

| #  | ARTICLE  | IF  | CITATIONS |
|----|--|-----|-----------|
| 55 | A Time Series Framework for Pricing Guaranteed Lifelong Withdrawal Benefit. Computational Economics, 2021, 58, 1225-1261.  | 1.5 | 3         |
| 56 | Stochastic Modeling Techniques for Secure and Survivable Systems. , 2008, , 171-207.   |     | 2         |
| 57 | Adaptive joint call admission control scheme in LTE-UMTS networks. , 2014, , .   |     | 2         |
| 58 | Performance analysis of voice over internet protocol via non Markovian loss system with preemptive priority and server break down. Opsearch, 2014, 51, 50-75.                                    | 1.1 | 2         |
| 59 | Effect of outliers on volatility forecasting and <math>V</math>alue at <math>R</math>isk estimation in crude oil markets. OPEC Energy Review, 2016, 40, 276-299.                                 | 1.0 | 2         |
| 60 | Optimal number of frames transmitted in a sensing based opportunistic spectrum access. Physical Communication, 2018, 26, 156-161.  | 1.2 | 2         |
| 61 | A Markov Modulated Dynamic Contagion Process with Application to Credit Risk. Journal of Statistical Physics, 2019, 175, 495-511.  | 0.5 | 2         |
| 62 | Tradeoff Between Performance and Energy-Efficiency in DRX Mechanism in LTE-A Networks. , 2019, , .   |     | 2         |
| 63 | Energy Harvesting Modelling and Analysis in LTE-A Networks with DRX Scheme. , 2019, , .  |     | 2         |
| 64 | Analysis of traffic offload using multi-attribute decision making technique in heterogeneous shared networks. IET Networks, 2019, 8, 256-263.  | 1.1 | 2         |
| 65 | Hedging and utility valuation of a defaultable claim driven by Hawkes processes. Applied Stochastic Models in Business and Industry, 0, , .  | 0.9 | 2         |
| 66 | Infinite-server systems with Hawkes arrivals and Hawkes services. Queueing Systems, 2022, 101, 329-351.  | 0.6 | 2         |
| 67 | Exact transient solutions of kinetics of first-order reactions with end effects. Journal of Mathematical Chemistry, 1999, 25, 281-294.   | 0.7 | 1         |
| 68 | Call processing delay analysis in cellular networks: a queuing model approach. Opsearch, 2009, 46, 289-302.  | 1.1 | 1         |
| 69 | Mean-variance optimal trading problem subject to stochastic dominance constraints with second order autoregressive price dynamics. Mathematical Methods of Operations Research, 2017, 86, 29-69. | 0.4 | 1         |
| 70 | Analysis of Mid-Haul Characteristics for LTE-NR Multi-Connectivity in Heterogeneous Cloud RAN. , 2019, , .   |     | 1         |
| 71 | Signaling Packet Aggregation and Compression in SIP Network: Modeling and Performance Evaluation. Wireless Personal Communications, 2020, 110, 651-676.  | 1.8 | 1         |
| 72 | Analysis of a model of batch arrival single server queue with random vacation policy. Communications in Statistics - Theory and Methods, 2021, 50, 5314-5357.                                    | 0.6 | 1         |

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|----|---|-----|-----------|
| 73 | Analysis of a Multiple Dual-Stage Vacation Queueing System with Disaster and Repairable Server. Methodology and Computing in Applied Probability, 2022, 24, 2485-2508.                            | 0.7 | 1         |
| 74 | Variable annuities valuation under a mixed fractional Brownian motion environment with jumps considering mortality risk. Applied Stochastic Models in Business and Industry, 2022, 38, 1019-1038. | 0.9 | 1         |
| 75 | Performance evaluation of IEEE 802.11 with stochastic reward nets. , 0, , .   |     | 0         |
| 76 | Adaptive Joint Call Admission Control Scheme for Heterogeneous Wireless Networks. , 2017, , .   |     | 0         |
| 77 | Analysis of Computational Complexity and Power Consumption in Cloud Based Heterogeneous RAN. , 2018, , .  |     | 0         |
| 78 | Delay Efficient Load Balancing Scheme for Component Carrier Selection in Carrier Aggregation in LTE-A. EAI/Springer Innovations in Communication and Computing, 2019, , 151-163.                  | 0.9 | 0         |
| 79 | A Markov regenerative process with recurrence time and its application. Financial Innovation, 2021, 7, .  | 3.6 | 0         |
| 80 | Estimation of Mortality Rate of COVID-19 in India using SEIRD Model. Opsearch, 0, , 1.  | 1.1 | 0         |
| 81 | Delay Efficient Load Balancing Scheme for Component Carrier Selection in Carrier Aggregation in LTE-A. , 2017, , .  |     | 0         |
| 82 | Review of Probability. , 2018, , 17-62.   |     | 0         |
| 83 | Transient solution of fluid queue modulated by two independent birth-death processes. International Journal of Operational Research, 2019, 36, 1.   | 0.1 | 0         |
| 84 | Partial Observed Fluid Queue Model for Rechargeable Batteries. , 2020, , .  |     | 0         |
| 85 | Applications of Fluid Queues in Rechargeable Batteries. Infosys Science Foundation Series, 2020, , 91-101.  | 0.3 | 0         |
| 86 | A contagion process with self-exciting jumps in credit risk applications. Stochastics, 0, , 1-20.   | 0.6 | 0         |
| 87 | Performance analysis of discrete-time Geo <sup>X</sup> /G/1 retrial queue with various vacation policies and impatient customers. RAIRO - Operations Research, 0, , .                             | 1.0 | 0         |
| 88 | Analysis of a Multiple M/M/1/DV Queueing System with a Dual-Threshold Policy, Vacation Interruption and a Waiting Server. Bulletin of the Iranian Mathematical Society, 0, , .                    | 0.4 | 0         |