



Dr.T Gunasekhar

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EDUCATION

Jan 2014-July 2017	Doctor of Philosophy , Department of Computer Science and Engineering, K L University, Vijayawada, India.
Thesis title	A Framework for Prevention and Detection of Insider attacks in cloud Infrastructure
Dec 2011-June 2013	Master of Technology , Department of Computer Science and Engineering, Sree Vidyanikethan Engineering College, JNT University, Anantapur, India.
Course competence	Achieved First Class with Distinction and awarded grade ‘O’ Module Include: Operating Systems, Cloud Computing, Data Structures, Information Security, Theory of Computation.
Sep 2007–April 2011	Bachelor of Technology in Information Technology , Dept. of Information Technology, JNT University, Anantapur, India.
Course competence	Achieved First class final year Dissertation work . Modules include: C Programming, Software Engineering, Embedded Systems, Network Security, Computer Networks, Data Base Management Systems, Computer Organization, Micro Processors and Controllers, Unix Systems.

EXPERIENCE

July 2021-Till Date Position:	Experian, India. Software Engineer- DevSecOps- Security
Aug 2017-April 2019 Position:	Koneru Lakshmaiah Educational Foundation, Guntur, India. Worked as Associate Professor, Dept of CSE.
April 2015-July 2016 Junior Research Fellow	K L University, Guntur, India. Project: Design and Development of an Effective Privacy Preserving Data Mining Technique for Cardiac, Cancer and Diabetic Healthcare
Jan 2014-Sep 2015 Position: Research Scholar	K L University, Guntur, India. Thesis: A Framework for Prevention and Detection of Insider attacks in Cloud Infrastructure

EXPERTISE

- Responsible for architecting, designing, implementing and supporting of cloud-based infrastructure and its solutions
- Managing Amazon Web Services (AWS) infrastructure.
- Proficient in AWS services like VPC, EC2, S3, ELB, Auto Scaling Groups (ASG), EBS, RDS, IAM, CloudFormation, Route 53, CloudWatch, CloudFront, CloudTrail.

- Experienced in creating multiple VPC's and public, private subnets as per requirement and distributed them as groups into various availability zones of the VPC.
- Insider threat prevention and detection in cloud environment using Trusted computing.
- CIS AWS benchmarking, vulnerability analysis and remediation.
- Implementing crypto methods for data at rest, data in use and data in transit.
- Application security in CI/CD jobs through Veracode.

PUBLICATIONS

1. Nikhil, S.G. and **Gunasekhar, T.**, Current Issues, Open research challenges, Future trends in Cloud Computing. **Distributed Computing** (Minor revisions) (IF=1.67)
2. Dey, N.S. and **Gunasekhar, T.**, 2019. A Comprehensive Survey of Load Balancing Strategies Using Hadoop Queue Scheduling and Virtual Machine Migration. **IEEE Access**, 7, pp.92259-92284. (IF=4.0098)
3. Bezawada, A., Marella, S.T. and **Gunasekhar, T.**, 2018. A Systematic Analysis of Load Balancing in Cloud Computing. *International Journal of Simulation--Systems, Science & Technology*, 19(6).
4. **Gunasekhar, T.**, K. Thirupathi Rao, A Novel SVM Based Kernel Function for Insider threat Detection in Cloud Infrastructure, *Journal of Advanced Research in Dynamical and Control Systems*, 9(3), pp. 56-63, 2017.
5. **Gunasekhar, T.**, K. Thirupathi Rao, Prevention and Detection of Insider attacks in cloud infrastructure using hardware assisted Method, *Journal of Advanced Research in Dynamical and Control Systems*, 9(4), pp. 81-87, 2017.
6. Kumari, D.A. and **Gunasekhar, T.** A Novel algorithm for data Perturbation for Privacy Preserving Healthcare Databases. *International Journal of Computer Science and Information Security*, Vol. 14 No.10, 2016
7. **Gunasekhar, T.**, K. Thirupathi Rao, P. Saikiran, and PV S. Lakshmi. "A Survey on Denial of Service Attacks." (2014).
8. **Gunasekhar, T.**, Rao, K.T., Reddy, V.K., Kiran, P.S. and Rao, B.T., 2015. Mitigation of Insider Attacks through Multi-Cloud. *International Journal of Electrical and Computer Engineering*, 5(1), p.136.
9. **Gunasekhar, T.** and Rao, K.T., 2014. EBCM: Single encryption, multiple decryptions. *International journal of Applied Engineering Research*, 9(19), pp.5885-93.
10. Anusha, M., Vemuru, S. and **Gunasekhar, T.**, 2015. Transmission protocols in Cognitive Radio Mesh Networks. *International Journal of Electrical and Computer Engineering*, 5(6).
11. Sastry, K.N., Rao, B.T. and **Gunasekhar, T.**, 2015. Novel Approach for Control Data Theft Attack in Cloud Computing. *International Journal of Electrical and Computer Engineering*, 5(6).
12. Kumari, D.A. and **Gunasekhar, T.**, 2016. A Reconstruction Algorithm using Binary Transform for Privacy-Preserving

Data Mining. *Indian Journal of Science and Technology*, 9(17).

13. Kumar, R.P., Babu, J., **Gunasekhar, T.** and Bhushan, S.B., 2015. Mitigating Application DDoS Attacks using Random Port Hopping Technique. *International Journal of Emerging Research in Management & Technology*, 4(1), pp.1-4.
14. Kumar, M.D., Basu, M.T. and **Gunasekhar, T.**, 2015. Meshing VANEMO protocol into VANETs. *International Journal of Applied Engineering Research*, 10(12), pp.31951-31958.
15. Karthik, K., **Gunasekhar, T.**, Meenu, D. and Anusha, M., 2016. A Study on IP Network Recovery through Routing Protocols. *Indonesian Journal of Electrical Engineering and Informatics (IJEI)*, 4(3), pp.176-180.
16. Reddy, C.V.S., Rao, G.S.N., Vurukonda, N. and **Gunasekhar, T.**, 2016. A Novel Technique for Optimal Power Allocation Efficient Spectrum Sharing Radio Cognitive Networks. *Indian Journal of Science and Technology*, 9(47).
17. V Suman venkata sai, K.Gowthami, N.M.V.Raghu shyam, K Thirupathi Rao, **T Gunasekhar**, N. Sarada, "a systematic survey on dynamic schedulers in hadoop", *Journal of Advanced Research in Dynamical and Control systems*, 2017.
18. Rao, K.T., Alekhya, M., Pavani, M.S., Kumar, M.N., **Gunasekhar, T.** 'A framework for mitigating insider attacks in cloud infrastructure", *International Journal of Pure and Applied Mathematics*, 2017.

CONFERENCE PRESENTATIONS

1. **Gunasekhar, T.**, K. Thirupathi Rao, and M. Trinath Basu. "Understanding insider attack problem and scope in cloud." *Circuit, Power and Computing Technologies (ICCPCT)*, 2015 International Conference on. IEEE, 2015.
2. Anusha, M., Srikanth Vemuru, and **T. Gunasekhar**. "TDMA-based MAC protocols for scheduling channel allocation in multi-channel wireless mesh networks using cognitive radio." *Circuit, Power and Computing Technologies (ICCPCT)*, 2015 International Conference on. IEEE, 2015.
3. **T.Gunasekhar**, "A Survey on IP Network Recovery through Routing Protocols" National Conference on Advanced Computing Applications, S V University, Tirupati, Feb 2013
4. **T.Gunasekhar**, "Secure Streaming Media Through Digital Rights Management", National Conference on Recent Trends in Information Technology, P V P Siddhartha Institute of Technology, Feb 2013.
5. **T.Gunasekhar**, "Modeling and Defense of E-mail Worms", National conference on Advanced Computing and Information Technology, Jerusalem College of Engineering, May 2013.
6. **T.Gunasekhar**, "Modeling and Defense of E-mail Worms", National conference on Advanced Computing and Information Technology, Jerusalem College of Engineering, May 2013.

BOOKS/PATENTS

1. *Detection and Mitigation of Insider Attacks in a Cloud Infrastructure: Emerging Research and Opportunities*,

Advances in Information Security, Privacy, and Ethics (AISPE), IGI Global Publications.2019.

2. *An Empirical survey on Load Balancing: A Nature Inspired Approach*, Scheduling Problem - New Applications and Trends. Intech Open, 2019.
3. **A Framework for Insider attack prevention in cloud Infrastructure through Trusted Cloud Computing**, Patent applied,2019.

MEMBERSHIPS

- IEEE Professional Membership
- ACM Member
- CSI Member

PERSONAL DETAILS

- Father name: Thummuru Mani
- Date & Place of Birth: 9 June 1990, Chittoor, Andhra Pradesh, India
- Gender: Male
- Citizenship: Indian

REFERENCES

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