

# EDUCATION

**Dr. T Gunasekhar**

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| **Jan 2014-July 2017**  **Thesis title** | **Doctor of Philosophy,** Department of Computer Science and Engineering, K L University, Vijayawada, India.  A Framework for Prevention and Detection of Insider attacks in cloud Infrastructure |
| **Dec 2011-June 2013 Course competence** | **Master of Technology,** Department of Computer Science and Engineering, Sree Vidyanikethan Engineering College, JNT University, Anantapur, India.  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 Course competence** | **Bachelor of Technology in Information Technology,** Dept. of Information Technology, JNT University, Anantapur, India.  Achieved First class final year **Dissertation work.**  Modules include: C Programing, Software Engineering, Embedded Systems, Network Security, Computer Networks, Data Base Management Systems, Computer Organization, Micro Processors  and Controllers, Unix Systems. |
| **TEACHING/RESEARCH EXPERIENCE**  **Aug 2017-Till Koneru Lakshmaiah Educational Foundation, Guntur, India.**  **Date Position:** Working as Associate Professor, Dept of CSE.  **Associate Professor** | |
| **Oct 2015- Sep 2017 Date Position: Junior Research Fellow** | **K L University, Guntur, India.**  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.**  A Framework for Prevention and Detection of Insider attacks in Cloud Infrastructure |
| **RESEARCH EXPERTISE**   * Cloud Computing * Distributed Computing * Edge computing * Operating Systems * TPM-based Computing | |

**PUBLICATIONS**

1. Dey, N.S. and **Gunasekhar, T**., Bio-Inspired Load Balancing Strategy for Cloud-Based Data Centre with Predictive Machine Learning Approach and Comparative Analogies, **IEEE Transactions on Evolutionary** **Computation** **(IF=11.16).(Communicated)**
2. Nikhil, S.G. and **Gunasekhar, T**.,Current Issues, Open research challenges, Future trends in Cloud Computing. **Materials today: Proceeding** (In Press).
3. 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)**
4. 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).
5. **Gunasekhar, T**., K. Thirupathi Rao, A Novel SVM Based Kernel Function for Insider Detection in Cloud Infrastructure, Journal of Advanced Research in Dynamical and Control Systems,9(3), pp. 56-63, 2017.
6. **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.
7. 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
8. **Gunasekhar, T**., K. Thirupathi Rao, P. Saikiran, and PV S. Lakshmi. "A Survey on Denial of Service Attacks." (2014).
9. **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.
10. **Gunasekhar, T**. and Rao, K.T., 2014. EBCM: Single encryption, multiple decryptions. International journal of Applied Engineering Research, *9*(19), pp.5885-93.
11. Anusha, M., Vemuru, S. and **Gunasekhar, T.**, 2015. Transmission protocols in Cognitive Radio Mesh Networks.

*International Journal of Electrical and Computer Engineering*, *5*(6).

1. 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).

1. 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).
2. 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.
3. 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.
4. 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 (IJEEI)*, *4*(3), pp.176-180.
5. 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).
6. 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.**
7. 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 Steaming 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.

# SPONSORED RESEARCH PROJECTS

1. **Conduction of national level Conferences/Workshops/Seminars/brain storming sessions etc of three days duration,** Project Proposal under the scheme of **ICPS** (**DST/ICPS/SCST/2020/1038**) (Under Processing).

**CERTIFICATIONS**

1. **ServiceNow- Certified System Administrator**
2. Architecting on AWS- Coursera
3. Getting Started with AWS Machine Learning- Coursera
4. Cloud Computing Applications- Coursera
5. Cloud Computing Applications, Part 2 : Big data and Applications- Coursera
6. Cloud Networking-Coursera

**TOOLS AND CLOUD PLATFORMS**

1. Amazon Web Services(AWS)
2. Eucalyptus
3. OpenStack
4. Google Cloud Platform(GCP)
5. CloudSim

**COURSES TAUGHT**

1. Distributed Computing
2. Cloud Computing
3. Parallel Computing
4. Cloud Systems & Infrastructure
5. Cloud Networking

# MEMBERSHIPS

* + IEEE Professional Membership
  + ACM Member
  + CSI Member

# PERSONAL DETAILS

* + Father name: Thummuru Mani
  + Date & place of Birth: 13th June 1990, Chittoor, Andhra Pradesh, India
  + Gender: Male
  + Citizenship: Indian

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| **REFERENCES** |  |  |
| **Professor K. Thirupathi Rao** Associate Dean- Academics Koneru Lakshmaiah University Vaddeswaram, Guntur, 522502  Mobile: +91 (0) 9440287259  e-mail: [kthirupathirao@kluniversity.in](mailto:kthirupathirao@kluniversity.in) | **Professor V. Ramesh** Department of Information Tech Mahatma Gandhi Institute of Tech Hyderabad, India.500075  Mobile: +91 (0) 7729992929  e-mail: [ramesh.v@mgit.ac.in](mailto:ramesh.v@mgit.ac.in) |  |
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