

Dr. T Gunasekhar

Address: Pedakanti Palli(V), Nandanoor Post, G D Nellore,

Chittoor, Andhra Pradesh-517125.

Contact: (+91) 9848984909

E-mail: tgunasekhar@outlook.in; tgunasekhar@kluniversity.in

**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 Programing, Software Engineering, Embedded Systems, Network Security,

Computer Networks, Data Base Management Systems, Computer Organization, Micro Processors

and Controllers, Unix Systems.

**EXPERIENCE** 

July 2021-Till Experian, India.

**Position: DevSecOps-Security SME.** 

**Software Engineer** 

Aug 2017-June 2021 Koneru Lakshmaiah Educational Foundation, Guntur, India.

**Position:** 

Working as Associate Professor, Dept of CSE. **Associate Professor** 

Oct 2015-Sep2017

K L University, Guntur, India. **Position: Junior** 

Research Fellow Design and Development of an Effective Privacy Preserving Data Mining Technique for Cardiac,

Cancer and Diabetic Healthcare

Jan 2014-Sep 2015

K L University, Guntur, India. **Position:** 

Research Scholar

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**

- 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).
- 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.
- 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. 14No.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).
- 12. 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).
- 13. 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).
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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).
- 18. 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.
- 19. 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**

- 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.
- 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.
- 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.
- 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**

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

# **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

## **MEMBERSHIPS**

- IEEE Professional Membership
- ACM Member
- CSI Member

## PERSONAL DETAILS

- Father name: Thummuru Mani
- Date & place of Birth: 13<sup>th</sup> June 1990, Chittoor, Andhra Pradesh, India
- Gender: Male
- Citizenship: Indian

#### REFERENCES

## Professor K. Thirupathi Rao

Associate Dean- Academics Koneru

Lakshmaiah University

Vaddeswaram, Guntur, 522502

Mobile: +91 (0) 9440287259

e-mail: 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