

DINESH S. REDDY

Texas A&M University-Central Texas

1001 Leadership Place, Killeen, TX 76549

EDUCATION

Ph.D. The University of Texas at San Antonio. 2017.

Major: Information Systems and Cybersecurity (3.8 / 4)

Dissertation: Exploring Factors Influencing Self-efficacy in Information Security: An Empirical Analysis by Integrating Multiple Theoretical Perspectives in the Context of Using Protective Information Technologies.

Chairperson: Dr. Glenn Dietrich (Ph.D., CISSP)

M.Tech International Institute of Information Technology (IIIT), Bangalore. 2007.

Major: Information Technology (3.3 / 4)

B.E. Sri Jayachamarajendra College of Engineering, Mysore. 2001.

Major: Electrical and Electronics (74%)

PROFESSIONAL EXPERIENCE

(Overall 14 years : 10 years in IT Industry and 4 years in Academics)

University of Colorado, Denver (Business School).

Aug 2017 – May 2018.

- Instructor, Information Systems & Cybersecurity
 - Assigned to teach 3 courses in fall 2017 (Introduction to voice and data security, Digital forensic analysis part I, and Analysis Modeling and Design)
 - Assigned to teach 3 courses in spring 2018 (Intrusion detection and incident response, Digital forensic analysis part II, and Systems Strategy, Architecture, and Design)
 - Named as lead participant in proposed cybersecurity research consortium at University of Colorado at Colorado Springs's National cybersecurity center.
 - Offered to take Initiative on setting up a Center of Excellence in cybersecurity, including cybersecurity curriculum development based on NSA knowledge units and cybersecurity labs development.
 - Assigned 40% department and college service.

The University of Texas at San Antonio, College of Business, TX.

Sep 2013 – Aug 2017.

- Research Assistant, Information Systems & Cybersecurity
 - Assisted professors at all stages of research work in IS discipline.

- Designed and taught various IS courses as Instructor (*Highest rating 4.85/5*).
- Designed in-class exercises, lab work, case studies that conform to learn-by-doing.
- Supervised, interviewed, tutored and offered career advice to undergraduate students.
- Worked closely with IT department to acquire student software, course equipment.
- Offered service to dept by organizing colloquiums, proctoring exams, reviewing.
- Involved with search committee by giving feedback on faculty candidate presentations.
- Audited cybersecurity and IS courses that help with faculty teaching & research.
- Prepared materials for submission to granting agencies & foundations (NSF).

MSys Technologies Pvt Ltd, Chennai. Reported to Atlanta (GA), Sunnyvale (CA) Feb 2013-Jul '13

- Senior QA Manager
 - Managed a 12 member team working on 3 onsite projects from USA client 'Panasas'. Projects were based on data availability using clustering.
 - Produced project plan, test strategy for storage and security testing tasks & initiatives.
 - Lead the team from test planning through release of Panasas data storage products.
 - Managed the effort to design, implement, execute & maintain test plans, test strategies. Took a hands-on approach to implement test strategy, improved overall product quality.
 - Lead the automation strategy for developing and executing automated test scripts.
 - Analyzed quality metrics/trends, summarized findings & presented to top management.
 - Collaborated effectively across functional organizations and across management levels to deliver the test results ahead of schedule.
 - Partnered with cross-team Dev and QA managers to implement quality initiatives and new projects based on Big data, Hadoop programming and cloud based applications.
 - Hired skillful candidates and facilitated their growth through knowledge transfer.

Hewlett Packard (HP) India Software Operations Pvt Ltd, Bangalore. Aug 2010-Nov 2012

- Technology Consultant (SQE3)
 - **Project 1. Polyserve CPE:** Supervised a team of 10 to successfully handle testing activities of "PolyServe". PolyServe is a highly available file system to provide a "shared-everything" clustering solution (up to 16 nodes) that supports concurrent reads and writes from multiple hosts using centralized storage.
 - My effective management resulted in work on critical customer escalations and timely patch releases to customers, hence ensuring business continuity.
 - Interfaced with top Management to conduct project management reviews (PMR), which helped me in addressing risks and issues. Cleared all hurdles faced by team.
 - Identified right test approaches, provided technical guidance that optimized delivery schedule. Responsible for scoping, planning, risk analysis, estimating, scheduling, tracking and reporting the testing activities.
 - Effectively applied people management skills like motivating, organizing, controlling, career planning, rewarding, appraisals, hiring & team building. Achieved least attrition.
 - Implemented SQA processes. Analyzed quality metrics which helped in constantly improving the processes through reviews and eliminated performance bottlenecks.

- Maintained build infrastructure, engineering web pages, compatibility guide, SVN.
- Taught storage concepts to engineers & reduced ramp-up time, increased productivity.

Project 2. IBRIX cloud based parallel file system : Successfully lead transition efforts from PolyServe to IBRIX. IBRIX is a patented file system for clusters with distributed meta-data and single multi-petabyte namespace. Features include an integrated volume manager, high availability, multi-component automatic failover, remote replication and a centralized management interface. It has high capacity scalable storage to support unstructured data growth (**BIG DATA**), fast access to data-intensive applications, dynamic segment migration for rebalancing & data tiering.

- Co-ordinated activities of cross-functional teams with Biz-IT team & maintained systems.
- Successfully reduced power consumption of data center by 25% with DCPC tool.
- Saved cost by Optimizing hardware utilization using MRT by analyzing usage pattern.
- Implemented storage consolidation across data center for effective storage allocation.
- Completed Lab risk migration with firewall for all teams and ensured lab security.
- Created and tested a disaster recovery plan for computer systems.

Project 3. Developed test automation to certify independent service vendors (ISV) such as NetBackup, Symantec and EV.

- Involved in designing & building the framework.
- Coded and tested scripts using Python. Team used this framework to further implement automation strategy.
- Successfully released automation scripts for Symantec.

EMC² Data Storage Systems India Pvt Ltd, Bangalore.

Jan 2007-Aug 2010

- Software Quality Engineer

Project 1. EMC[®] NetWorker[®] software is a high-capacity, easy-to-use data storage management solution that protects and manages enterprise data across an entire network, using backup and restore capabilities.

Project 2. PowerSnap[®] integrates snapshot technology into NetWorker. PowerSnap's advanced features are configured through NetWorker.

Project 3. Database Modules integrate data protection procedures of databases such as Oracle (NMO), SAP (NMSAP), SQL (NMSQL), Sybase (NMS) into NetWorker & PowerSnap.

Project 4 NetWorker Fast Start simplifies licensing, installation, & configuration for mid-size enterprises. It prepackages components to backup applications such as Exchange, SQL Server, SharePoint, Oracle.

- Lead a team of 6. Responsible for planning, status tracking and reporting most test activities. Successfully delivered multiple test cycles and releases with highest quality.
- Built test setups by installing, configuring, & debugging of OS, DB, supporting software and Applications. Ensured that test setup is up and running to avoid execution blockage.
- Developed and executed test cases by performing Acceptance, Sanity, Functional, C&I, Performance, security and Regression testing.

- Prepared defect list by analyzing test execution results. Attended defect triage meetings, reproduced and validated defects, completed all defect verifications.
- Authored and reviewed documents such as QA Test plan, TDS, test cases, test data.
- Consolidated, reviewed and sent detailed daily/weekly status reports of test team.
- Maintained a set of automation scripts and executed them on UNIX setups.
- Worked on customer escalations by reproducing the defect scenarios.
- Ramped up new employees on product, processes, workflows and Information storage.

CBay Systems India Pvt Ltd, Bangalore.

May 2004-Jul 2005

- Software Testing Engineer

CBay Scribe and CBay Flo projects are in-house Medical & Healthcare IT web applications used for medical transcription.

- Tested functionality, server response, reliability, content, accuracy & consistency of web applications under simulated and real environments.
- Involved in writing test scripts during the design phase, executed test cases for change request by analyzing the impact of adding new features to the website.
- Involved in Reporting, tracking, reviewing and verifying software bugs.
- Successfully deployed applications at client site, handled escalations.
- Trained the new employees on processes and domain specific skills.

Reliance InfoStreams Pvt Ltd, Mumbai.

Sep 2001-May 2004

- Application Test Engineer

PMS is an application used to monitor contact center employee's performance metrics. Involved in Application installation, configuration, testing and support.

- Developed & executed test cases for change requests.
- Reported & verified software bugs.
- Successfully deployed, upgraded, maintained applications at Reliance Infocomm.

CONFERENCE PRESENTATIONS / PUBLICATIONS

1. Reddy, D., & Dietrich, G. (2016). Identifying Multiple Categories of Cybersecurity Skills that Affect User Acceptance of Protective Information Technologies. (Proceeding of AMCIS Aug 2016)
2. Reddy, D., & Rao, V. (2016). Cybersecurity Skills: The Moderating Role in the Relationship between Cybersecurity Awareness and Compliance. (Proceeding of AMCIS Aug 2016)
3. Reddy, D., Rao, V., Dietrich, G. (2017). Cybersecurity Training and the End-User: Pathways to Compliance (Proceedings of CISSE-2017, Las Vegas NV. Best Student cyber paper of the year)
4. Exploring Factors Influencing Self-efficacy in Information Security (Doctoral consortium at HICSS, Hawaii Jan 2018)
5. Reddy, D., Dietrich, G. (2017) Is Self-Efficacy in Information Security Better Modeled as a Predictor Variable or a Mediator Variable to Increase Compliance? (Proceeding of AMCIS Aug 2017)

OTHER RESEARCH PAPERS

1. Reddy, D. Building a Taxonomy of Cybersecurity Skills relevant to situation centric cyber-attacks. (Research in progress)
2. Reddy, D., Dietrich, G., Rao, V. Self-Efficacy Studies Applicable to Multiple Aspects of Cybersecurity: A Systematic Review of IS Literature. (RIP)
3. Reddy, D., Rao, V. Unlocking the Mixed Results of the Effect of Self-Efficacy in Information Security on Compliance: The Role of Over-Confidence. (RIP)
4. Reddy, D., Rao, V. Can personality traits moderate the increase in self-efficacy in information security? Implications for cybersecurity skills development. (RIP)

GRANTS AND SCHOLARSHIPS

1. Best "Student cyber paper of the year" grant award to attend 21th annual CISSE (The colloquium for Information Security Education) - Las Vegas, NV. Jun 2017
2. ACM SIGMIS CPR-2017 travel grant to attend doctoral consortium & present dissertation work – Bangalore. Jun 2017
3. Department of Cybersecurity grant for attending ACM SIGMIS CPR. Jun 2017
4. **Federal NSF** awarded travel grant to attend 20th annual CISSE (The colloquium for Information Security Education) – Philadelphia, PA. Jun 2016
5. AIS conference grant for ICIS registration – Dublin. Ireland. Dec 2016
6. AIS conference grant for AMCIS registration – San Diego, CA. Aug 2016
7. Department of cybersecurity conference grant for AMCIS – San Diego, CA. Aug 2016
8. AIS conference grant for ICIS registration – Fort Worth, TX. Dec 2015
9. UTSA College of Business scholarship and financial Aid for 4 years. 2013-2017

RESEARCH POSTER PRESENTATIONS

1. AMCIS - Boston, MA Aug 2017
Is Self-Efficacy in Information Security Better Modeled as a Predictor Variable or a Mediator Variable to Increase Compliance?
2. College of Sciences Conference at UTSA, San Antonio, TX Oct 2016
Cybersecurity Skills: The Moderating Role in the Relationship between Cyber Awareness and Compliance.
3. AMCIS - San Diego, CA Aug 2016
Identifying Multiple Categories of Cybersecurity Skills that Affect User Acceptance of Protective IT.
4. AMCIS - San Diego, CA Aug 2016
Cybersecurity Skills: The Moderating Role in the Relationship between Cyber Awareness and Compliance.

5. CISSE - Philadelphia, PA Jun 2016
Cybersecurity Training and the End-User: Pathways to Compliance.
6. College of Sciences Conference at UTSA, San Antonio, TX Oct 2015
The Influence of Cybersecurity Skills on User Acceptance of Protective Information Technologies.

TEACHING EXPERIENCE - COURSES TAUGHT (As Full Instructor)

1. ISMG 6880 Intrusion Detection and Incident Response (UC Denver, Spring 2018)
2. ISMG 6895 Digital Forensic Analysis part II (UC Denver, Spring 2018)
3. ISMG 3600 Systems Strategy, Architecture, and Design (UC Denver, Spring 2018)
4. ISMG 6860 Introduction to Voice and Data Security (UC Denver, Fall 2017)
5. ISMG 6865 Digital Forensic Analysis part I (UC Denver, Fall 2017)
6. ISMG 6060 Analysis, Modeling, and Design (UC Denver, Fall 2017)
7. IS2043 Object Oriented Programming in JAVA. (UTSA, Spring 2017)
8. IS2041 Intermediate Object Oriented (JAVA) programming Lab. (UTSA, Spring/Fall 2016)
9. IS2031 Introduction to Programming Concepts Lab. (UTSA, Spring 2016)
10. IS4053 Systems Analysis and Design. (UTSA, Fall 2015)
11. IS3003 Fundamentals of Information Systems for Management. (UTSA, Spring 2015)

TEACHING AND RESEARCH INTERESTS

1. Cybersecurity

- Information Assurance and Security
Text: Principles of Computer Security 4th edition, Conklin, White, Cothren, Williams, and Davis, McGraw.
- Intrusion Detection and Incident Response
Text: Incident Response and Computer Forensics, Mandia, Kevin, Prorise, Chris, Matt McGraw Hill, 2014
- Introduction to Telecommunications for Business
Text: Business Data Communications and Networking (Twelfth Edition), Fitzgerald, Dennis & Durcikova.
- Operating Systems Security
Text: Jang, M. and R. Messier. 2015. Security Strategies in Linux Platforms and Applications, 2nd Edition.
- Introduction to Voice and Data Security
Text: Computer Security Handbook, 4ed, by Bosworth and Kabay
- Digital Forensic Analysis I (Intro to computer forensics)
Text: Carrier, Brian, File System Forensic Analysis, Addison-Wesley, 2005, pgs 569.
- Digital Forensic Analysis II (Advanced)
Text: Carvey, Harlan (2014) Windows Forensic Analysis, 4th Edition, Syngress
- Network Security
Text: Corporate Computer Security (Fourth Edition), 2015. Boyle, R. J. & Panko, R. R. Pearson Education

- Security Risk Analysis
Text: Hacking Exposed, 4th Edition , by McClure, Scambray , and Kurtz., McGraw Hill publisher, 2003.
- SCADA (Cyber Physical Systems)
Text: William T. Shaw. *Cybersecurity of SCADA Systems*, Published by PennWell
- Policies for Information and Infrastructure Assurance
Text: Security Program and Policies: Principles and Practices, 2nd Edition, by Sari Greene
- Malware Agent Analysis
Text: Sikorski, Michael; Honig, Andrew, Practical Malware Analysis: Dissecting Malicious Software (2012).
- Cyber Attack and Defense
The Hacker Playbook 2: Practical Guide To Penetration Testing, by Peter Kim
- Secure software development, Security Testing and Web Application Security

2. Data Analytics, Databases, Programming, IT, Cloud Computing

- Data Analytics/Advanced Statistical Learning using R.
Text: An Introduction to Statistical Learning with Applications in R.” by James, Witten, Hastie, Tibshirani.
- Introduction to Data Mining
Text: Data Mining Techniques for Customer Relationship Management, by Linoff, Berry, 3rd ed, Wiley.
- Multivariate/Statistical Methods for Business Analysis
Text: Hair, Black, Babin, Anderson (2010). Multivariate Data Analysis. Upper Saddle River: Prentice Hall.
- Introduction to Business Analytics
Text: Applied Regression Modeling: A Business Approach by Iain Pardoe (2006) from Wiley & Sons.
- Application Development
Text: Python for Data Analysis, O’Reilly
- Mobile Application Development
- Database Management for Information Systems
Text: Essentials of Database Management, Jeffrey A. Hoffer, Heikki Topi, Ramesh Venkataraman
- Advanced Database Concepts
Text: Database Systems: Design, Implementation, and Management by Coronel, Morris, Cengage; 11e
- Data Foundations
Text: Data Mining: The Textbook by Charu C. Aggarwal
- Information Technology (Emphasis on infrastructure)
- Cloud (distributed) infrastructure computing and management

PROFESSIONAL SERVICE

Manuscript Reviewer for various Conferences

- Managing security in organizations: Adoption of information security solutions (ACM SIGMIS CPR 2017)

- The Impact of Procedural Security Countermeasures on Employee Security Behavior: A Qualitative Study (Workshop on Information Security and Privacy at ICIS 2017)
- Phishing Training: A Preliminary Look at the Effects of Different Types of Training blinded (Workshop on Information Security and Privacy at ICIS 2017)
- Priming Security Behavior: A Study Based on Self-Concept Maintenance Theory (Americas Conference on Information Systems 2016)

Doctoral Student Volunteer at various Conferences

- International Conference on Information Systems, Dublin Ireland 2016
- Americas Conference on Information Systems, San Diego, CA 2016
- International Conference on Information Systems, Fort Worth, TX 2015

CONFERENCES ATTENDED

- AMCIS, Boston, MA as a presenter and doctoral student volunteer. Aug 2017
- CISSE, Las Vegas, NV as a best student cyber paper of the year presenter. Jun 2017
- ICIS, Dublin, as doctoral student volunteer. Dec 2016
- Alamo Ace conference, San Antonio, TX as attendee. Dec 2016
- College of sciences conference at UTSA, San Antonio, TX as poster presenter. Oct 2016
- AMCIS, San Diego, CA as a presenter and doctoral student volunteer. Aug 2016
- CISSE, Philadelphia, PA as a research poster presenter. Jun 2016
- ICIS, Fort Worth, TX as a doctoral student volunteer. Dec 2015
- Alamo Ace conference, San Antonio, TX as attendee. Nov 2015
- College of sciences conference at UTSA, San Antonio, TX as poster presenter. Oct 2015
- Alamo Ace conference, San Antonio, TX as attendee. Nov 2014

TECHNICAL SKILLS SUMMARY

Data Storage Strategies:

- EMC Symmetrix DMX, EMC Clariion, IBM Tivoli Storage Manager (IBM TSM), servers, switches, SAN, NAS, DAS, iSCSI, Fibre Channel, Zoning, Object storage (EMC Elastic cloud storage), High speed interconnects, Data migration, SMB, RAID, Thin provisioning, storage hierarchies, VM.

File Systems:

- Distributed file systems such as Network file systems (NFS), Hadoop distributed file system (HDFS), and Lustre vs Panasas Storage, Parallel file systems (GPFS, PVFS), Clustered file system (CFS), Global file systems 2 (GFS2), Common Internet File System (CIFS), Disk files systems such

as Journalled File System (JFS), Veritas file system (VxFS), FAT, NTFS, and ext, Database file systems such as IBM DB2.

Storage Tools:

- HP Command View EVA, IBM Netcool, Samba, Top, NetStat, VmStat, iostat, pmap, nmon, Vmware, ESX(i),

Security Strategies:

- Software Security, Mobile Application Security, Cloud Application/data center Security, (Openstack, AzureStack), Virtualization Security, Reverse Engineering, Malware Analysis, Security of IoT, Cyber Physical Systems (SCADA), Firewall security, UAV Security, Operating systems Security, Network security, Embedded hardware design for cybersecurity, Promoting cybersecurity research, education and outreach activities, Security risk analysis/ management, Human factors of cybersecurity, Computer and mobile forensics, Penetration testing, Information assurance, Ethical hacking, IS audit, Policies, Business Continuity and Disaster Recovery, Encryption, Steganography, Cryptography.

Security Tools:

- NMap, Logwatch, Swatch, Darkstat, ZFS (Data integrity), FreeNAS (with encryption), Wireshark, Snort (WinSnort), ACID, tcpdump, Windump, ntop, OpenSSH/puTTY, traceroute, SysInternals, MD5, SHA, Cain, HFNetCheck, DumpSec, OpenVAS(Nessus), MBSA, EMET, Kerberos, PGP, VOMIT, Whisker, Share sniffer, SuperScan, SnifferPro, NetXRay, FTK.

Software Testing Strategies:

- Acceptance, Functional, Sanity, C&I, Performance, GUI, Security, Penetration, Regression. Defect validation and verification. Maintaining build infrastructure, configuration management and patch release. SDLC, STLC, quality standards, RCA.

Software Testing Tools:

- Functional (QTP, Selenium), Non-Functional (LoadRunner, JMETER), SVN, Quality Center, starwind, cygwin, bugzilla, sharepoint, Rational Clear Quest, Humming bird, WinSCP, Vnc, WST.

Programming: Java, C, C++, Python (Anaconda), Perl, Dr.Java, Eclipse, Spyder IDE.

Databases: SQL Server, Oracle, MySQL, Visio, SQL, Access, SQL Developer, SQL Data Modeler, NoSQL.

Operating Systems: Multiple versions of Windows, Linux, Solaris, HP-UX, AIX.

Statistical Tools: SPSS 3.0, AMOS, SmartPLS 3, HLM, Eventus, R, SAS Miner, XLMiner.

Cloud: Amazon web services (AWS), Google cloud, Azure, Openstack.

Scripting Tools: python, perl, php, bash, ksh, grep, sed, awk.

System Tools: cron, snmp, nagios, syslog, expect

Web Application: HTTP, HTTPs (server security), HTML, DHTML, XHTML, XML, Javascript, Servlets, PHP, FTP, GridFTP(with Grid Security Infrastructure), Apache server.

Online Learning: BlackBoard Learn.

MANAGEMENT SKILLS SUMMARY

- Experienced in managing result oriented test teams and project ownership to ensure business continuity.
- Skilled in scoping, planning, risk analysis, estimating, scheduling, tracking, reporting the test activities.
- People management and leadership skills like motivating, organizing, monitoring, controlling, negotiating, career planning, rewarding, appraisals, hiring and team building.
- Capable of optimizing test cycles, cost and delivery schedule with right strategy, approach, test techniques, methodologies, defect tracking, reviewing test artifacts and technical guidance.
- Eliminating performance bottlenecks by analyzing quality metrics, implementing relevant SQA processes.
- Good at promoting flexible attitude, positive atmosphere in teamwork by proactively identifying and resolving issues; Handle pressure on conflict resolution; Cross team co-ordination at organization level; Deliver outstanding customer service.

CERTIFICATIONS

- Information Storage and Management from EMC.
- EMC Implementation Engineer in Information Backup and Recover.
- Business English Communication from Cambridge University.

SYNERGISTIC ACTIVITIES

- HP employee of the month award for going extra mile in fixing critical issues. Feb 2012
- HP Star performer award. Apr 2011
- HP eAward (E001011206) for outstanding efforts and commitment to work. Dec 2010
- EMC Go-To-Market-Team award for NetWorker Fast Start project. Jan 2009
- EMC Platinum Star Award for the NetWorker Fast Start project. Jul 2008
- Reliance Top Performer Awards. Jul 2003
- ITI award for scoring highest marks in Kannada in SSLC. Nov 1995
- Vijaya High School award for highest marks in language subject in SSLC. Jun 1995
- Sports and Cultural events awards in Vijaya High School. 1994-95
- Top 10% scorer in the XXV Interstate talent tests in Mathematics. Jan 1994
- Certificate award (JFA1635921) in First Aid Junior level by St. John's. Aug 1991

OTHER ACTIVITIES

- Conference attendee - “Microsoft Academic Day” at PESIT, Bangalore. Mar 2006
- Conference attendee - “Techvista 2006” organized by Microsoft, Bangalore. Jan 2006
- Conference attendee - Techfest “Osmosis” organized MindTree, Bangalore. Dec 2005
- Industrial Training in Central Power Research Institute (CPRI), Bangalore. Mar-Apr 2000
- Industrial Training in New Government Electric Factory (NGEF), Bangalore. Aug-Sep 1999

PROFESSIONAL ASSOCIATIONS

- Association for Computing Machinery (ACM). Member since 2017.
- Association of Information Systems (AIS). Member since 2015.