Curriculum Vitae
Sunho Lim

Dept. of Computer Science
Texas Tech University
Lubbock, TX 79409
Citizenship: U.S. Citizen (Naturalized)

E-mail: sunho.lim@ttu.edu
Hpage: http://www.myweb.ttu.edu/slim

Significant Performance – Highlights

- My research interests are in the areas of (i) Mobile Data Management and Privacy, (ii) Cybersecurity, and (iii) Wireless Networks and Mobile Computing. I have published more than 80 papers and two papers were awarded **Special Interest Group – Instructional Technology (SIG – IT) Best Paper Award** (2012) and nominated for a **Best Paper Candidate – IEEE MASS** (2004), respectively. I was also awarded **Texas Tech University (TTU) Undergraduate Research Conference Award – Top Poster Presenter** (2014). I am a **Senior Member of the IEEE**.
- I have been awarded total **$940,218** external grants, where my share is **$210,799**. My research has been supported in part by National Science Foundation (NSF), Intel Corp., Air Force Research Laboratory (Rome, NY), Air Force Summer Faculty Fellowship Program (AF – SFFP), Office of Naval Research Summer Faculty Research Program (ONR – SFRP), and South Dakota Board of Region. I was also awarded **Texas Tech Alumni Association New Faculty Award – University Award** (2015). I was selected as **Air Force Research Laboratory Summer Faculty Fellow** (2013) and **Office of Naval Research Summer Faculty Fellow** (2017 & 2018) twice. In addition, I was selected as **Brain Pool Program Invited Scientist** (2022) by the Ministry of Science and ICT (MSIT) and National Research Foundation of Korea (NRF). I am currently leading a T^{2}WISTOR: TTU Wireless Mobile Networking Laboratory.
- I have been teaching **25+** different undergraduate and graduate courses for **16+ years**. I have received excellent student evaluations for the **last 12 years** in terms of lecture and subject ratings at Texas Tech University: Lecture Rating (Overall this instructor was effective, **Average 4.75/5.0**) and Subject Rating (Overall this course was a valuable learning experience, **Average 4.62/5.0**). I was nominated for **Texas Tech Parent Association Hemphill-Wells New Professor Excellence in Teaching Award** (2013). I was also selected as **STEM Teaching, Engagement & Pedagogy (STEP) Program Faculty Fellow** (Fall 2018 – Spring 2019) in the Teaching, Learning & Professional Development Center (TLPDC) at Texas Tech University. I am a **TTU Teaching Academy Member**, selected only 20% of the Texas Tech faculty since its inception in 1997.
- I have been advising 16 graduate (**3 Ph.D. and 13 M.S.**) and 16 undergraduate students since I joined at Texas Tech University. Three Ph.D. students graduated and joined U.S. universities as a Tenure-track Assistant Professor, and all 13 M.S. students joined diverse IT industry. I invited two visiting scholars for collaboration. I was honored as **A Most Influential Faculty Member** (2016, 2019 & 2020) three times in the Whitacre College of Engineering Honors Convocation at Texas Tech University.
- I have been actively participating in internal/external services and STEM outreach activities. I have been serving for university and department as a committee member with diverse roles at Texas Tech University. I also served as a NSF proposal review panel, a guest editor (Int'l Journal of Distributed Sensor Networks, Hindawi, 2013), a technical program committee, and a reviewer of renowned conferences and journals. I co-organized a summer camp, and taught under-represented minority students in the Parkway Elementary School (Lubbock ISD, TX), **Scratch Summer Camp** (2012), and K-12 students, **The STEM Camp: Data Science, Cybersecurity, and Coding** (2019). I also provided a **Professional Development** (2017) for elementary school teachers in Dallas Independence School District (DISD, TX). In addition, I was selected as **Institute for Inclusive Excellence Fellow** (Fall 2015 – Spring 2016) in the Division of Institutional Diversity, Equity & Community Engagement.

Education

- **Ph.D. in Dept. of Computer Science and Engineering** (Aug 2005)
  GPA: 3.79 / 4.0
  Dissertation: Design and Analysis of Wireless and Mobile Networks
  The Pennsylvania State University, University Park, PA 16802
  Advisor: Dr. Chita R. Das (Former NSF Director and Current Department Head)
- **M.S. in Dept. of Computer Engineering** (Feb 1998)
  GPA: 4.0 / 4.0
  Thesis: Efficient Task Allocation Algorithm for Heterogeneous Multiprocessor Systems
  Hankuk Aviation University (a.k.a., Korea Aerospace University), Korea
  Advisor: Dr. Soohoan Chae
- **B.S. in Dept. of Computer Science** (Feb 1996)
  GPA: 4.07 / 4.5 (Summa Cum Laude)
  Hankuk Aviation University (a.k.a., Korea Aerospace University), Korea

Professional Employment

- **Assistant Professor (Tenured)** (Sept 2009 – Present)
  Dept. of Computer Science
  Texas Tech University, Lubbock, TX 79409
- **Brain Pool Program Invited Scientist** (Dec 2021 – Aug 2022)
  The Ministry of Science and ICT (MSIT) and National Research Foundation of Korea (NRF)
- **Office of Naval Research Summer Faculty Fellow** (May – July 2018)
  Space and Naval Warfare Center Atlantic, North Charleston, SC 29410
- **Office of Naval Research Summer Faculty Fellow** (May – July 2017)
  Space and Naval Warfare Center Atlantic, North Charleston, SC 29410
- **Air Force Research Laboratory Summer Faculty Fellow** (May – Aug 2013)
  Air Force Research Laboratory, Rome, NY 13441
- **Assistant Professor** (Aug 2005 – May 2009)
  Software Engineering Program
  Dept. of Electrical Engineering and Computer Science
  South Dakota State University, Brookings, SD 57007
- **Instructor/Teaching Assistant/Research Assistant** (Aug 1998 – Aug 2005)
  Dept. of Computer Science and Engineering
  The Pennsylvania State University, University Park, PA 16802
- **Teaching Assistant/Research Assistant** (March 1996 – Dec 1997)
  Dept. of Computer Engineering,
  Hankuk Aviation University (a.k.a., Korea Aerospace University), Korea
- **Sergeant** (Jan 1992 – May 1994)
  2^{nd} Division, The Republic Of Korea Army (ROK Army)

Awards & Honors

- **Brain Pool (BP) Program Invited Scientist** (Jun 2021)
  The Ministry of Science and ICT (MSIT) and National Research Foundation of Korea (NRF)
- **TTU Faculty Development Leave** (Feb 2021)
  Texas Tech University, Lubbock, TX 79409
- **TTU Teaching Academy Member** (May 2020)
  The Texas Tech University Teaching Academy
  Texas Tech University, Lubbock, TX 79409
- **A Most Influential Faculty Member** (May 2020)
  The Whitacre College of Engineering Honors Convocation
  Texas Tech University, Lubbock, TX 79409

- **A Most Influential Faculty Member** (May 2019)
  The Whitacre College of Engineering Honors Convocation
  Texas Tech University, Lubbock, TX 79409
- **STEM Teaching, Engagement & Pedagogy (STEP) Program Faculty Fellow** (Sept 2018 – May 2019)
  Teaching, Learning & Professional Development Center (TLPDC)
  Texas Tech University, Lubbock, TX 79409
- **Office of Naval Research Summer Faculty Fellowship** (Mar 2018)
  Office of Naval Research Summer Faculty Research Program (ONR – SFRP)
  Office of Naval Research (ONR)
- **IEEE Senior Member** (Aug 2017)
  Institute of Electrical and Electronics Engineers (IEEE)
- **Office of Naval Research Summer Faculty Fellowship** (Feb 2017)
  Office of Naval Research Summer Faculty Research Program (ONR – SFRP)
  Office of Naval Research (ONR)
- **A Most Influential Faculty Member** (May 2016)
  The Whitacre College of Engineering Honors Convocation
  Texas Tech University, Lubbock, TX 79409
- **Institute for Inclusive Excellence Fellow** (Fall 2015 – Spring 2016)
  Division of Institutional Diversity, Equity & Community Engagement
  Texas Tech University, Lubbock, TX 79409
- **Texas Tech Alumni Association New Faculty Award** – University Award (Apr 2015)
  Texas Tech University, Lubbock, TX 79409
- **TTU Undergraduate Research Conference Award – Top Poster Presenter** (Apr 2014)
  The TTU Center for Active Learning and Undergraduate Engagement
  Texas Tech University, Lubbock, TX 79409
- **Texas Tech Parent Association Hemphill-Wells New Professor Excellence in Teaching Award Nominee** (Oct 2013)
  Texas Tech University, Lubbock, TX 79409
- **Air Force Research Lab Summer Faculty Fellowship** (Apr 2013)
  Air Force Research Lab Summer Faculty Fellowship Program (AFFP – SFFP)
  Air Force Office of Scientific Research (AFOSR)
- **Special Interest Group – Instructional Technology (SIG–IT) Best Paper Award** (Apr 2012)
  Annual Meeting, American Educational Research Association (AERA)
- **Governor's 2010 Individual Research Seed Grant Award** (Jun 2007)
  South Dakota Board of Regents
- **IEEE TCDP Student Travel Grant Award** (Jun 2005)
  International Conference on Distributed Computing Systems (ICDCS 2005)
- **NSF Student Travel Grant Award** (Oct 2004)
  IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2004)
- **Best Paper Candidate** (Oct 2004)
  IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2004)
- **Best Graduate Student Teaching Assistant Award** (Mar 2002)
  Dept. of Computer Science and Engineering
  The Pennsylvania State University, University Park, PA 16802
- **CoManage Award for Excellence in Networking** (Jan 2000)
  Comanagement Corporation, U.S.A.
  Dept. of Computer Science and Engineering
  The Pennsylvania State University, University Park, PA 16802
- **Summa Cum Laude** (Feb 1996)
  Dept. of Computer Science
  Hankuk Aviation University (a.k.a., Korea Aerospace University), Korea

Research Interests

- Mobile Data Management and Privacy, Cybersecurity, and Wireless Networks and Mobile Computing

Research Grant Efforts

- My research has been supported in part by National Science Foundation (NSF), Intel Corp., Air Force Research Laboratory (Rome, NY), Air Force Summer Faculty Fellowship Program (AF – SFFP), Office of Naval Research Summer Faculty Research Program (ONR – SFRP), and South Dakota Board of Regent. I was awarded total **$940,218** external grants, where my share was **$210,779**. I was awarded **Texas Tech Alumni Association New Faculty Award** – University Award.

Pending Grant

- **Sunho Lim (PI)**, REU Site: Interdisciplinary Research Experiences to Mitigate Disaster Challenges for the Socioeconomically Disadvantaged, Total $389,709 (Credit 20%, $77,942), National Science Foundation (NSF), Submitted at Aug 2021

External Grant

1. **Sunho Lim (PI)**, Office of Naval Research Summer Faculty Fellowship, Total $14,000, (Credit 100%, $14,000), Space and Naval Warfare Center Atlantic, Office of Naval Research (ONR), May 2018 - July 2018
2. **Sunho Lim (PI)**, Office of Naval Research Summer Faculty Fellowship, Total $14,000, (Credit 100%, $14,000), Space and Naval Warfare Center Atlantic, Office of Naval Research (ONR), May 2017 - July 2017
3. **Sunho Lim (PI)**, IoT Devices for CS5331: Special Problems in Computer Science – Internet of Things and Its Applications Course (20 sets of Intel Galileo Gen 2 Development Board, Grove Starter Kit Plus – Intel IoT Edition for Galileo Gen 2, and IoT Academic Program S/W (Micro SD Card)), Total $3,500 (Credit: 100%, $3,500), Intel Corporation, May 2015
4. **Sunho Lim (PI)**, Detection of Selective Forwarding Attacks in Energy Harvesting Wireless Sensor Networks, Total $6,955, (Credit 100%, $6,955), Summer Faculty Extension Grant, Air Force Research Laboratory (Rome, NY), Jul 2013
5. **Sunho Lim (PI)**, Embedded Software Development and Debug Tools through Vitalized Project-based Learning, Total $25,000 and 12 Intel Atom-based Embedded Systems Testing Boards (Credit: 100%, $25,000), Intel Corporation, Jul 2013
6. **Sunho Lim (Co-PI)**, Federal Cyber Service: Scholarship for Service (SFS) Program, An Innovative Interdisciplinary Cybersecurity Education Program for Protecting Critical Infrastructure, Total $299,967 (Credit: 10%, $29,996), National Science Foundation (NSF), Oct 2012
7. **Sunho Lim (Co-PI)**, Modern Embedded Computing and Its Applications, Total $25,000 (Credit: 50%, $12,500), Intel Corporation, Aug 2012
8. **Sunho Lim (Senior Personnel)**, MRI: Development of Real Time Simulator for Smart Grid Systems Integrated with Distributed Renewable Energy Sources, Total $415,000 (Credit 5%, $20,750), National Science Foundation (NSF), Oct 2010
9. **Sunho Lim (PI)**, Research Experiences for Undergraduates (REU) Supplemental, Total $5,000 (Credit 100%, $5,000), National Science Foundation (NSF), Feb 2010
10. **Sunho Lim (PI)**, Research Experiences for Undergraduates (REU) Supplemental, $4,360 (Credit 100%, $4,360), National Science Foundation (NSF), Sept 2008
11. **Sunho Lim (Lead-PI)**, Collaborative Research: NEDG: Exploring Data Access in Internet-based Wireless Mobile Networks, Total $50,000 (Credit 100%, $50,000), National Science Foundation (NSF), Sept 2008
12. **Sunho Lim (PI)**: Development of a Reliable and Delay-Sensitive Medium Access Control Scheme for Vehicular Ad Hoc Networks, Total $52,718 (Credit 100%, $52,718), Governor's 2010 Individual Research Seed Grant, South Dakota Board of Regent, Aug 2007

Internal Grant

13. **Sunho Lim (PI)**, Alternative Energy Research, One summer month salary (Credit 100%), Texas Tech University, Jun 2016
14. **Sunho Lim (PI)**, Alternative Energy Research, Two summer months salary (Credit 100%), Texas Tech University, Jun 2015
15. **Sunho Lim (PI)**, Alternative Energy Research, Two summer months salary (Credit 100%), Texas Tech University, Jun 2014
16. **Sunho Lim (PI)**, Alternative Energy Research, One summer month salary (Credit 100%), Texas Tech University, Jun 2012
17. **Sunho Lim (PI)**, VMAC: An Efficient Medium Access Control Protocol for Vehicular Ad Hoc Networks, Total $2,500 (Credit 100%, $2,500), Research/Scholarship Support Fund, South Dakota State University, Mar 2007
18. **Sunho Lim (PI)**, Design and Development of Software Engineering Program, Total $2,500 (Credit 100%, $2,500), New Ideas Start-Up Fund, South Dakota State University, Jul 2006

PUBLICATIONS (Advised students are marked by a star, '*'.)

- I have published more than 80 papers and two papers were awarded as **Special Interest Group – Instructional Technology (SIG–IT) Best Paper Award** and nominated for a **Best Paper Candidate**, respectively. I was also awarded **Texas Tech University Undergraduate Research Conference Award – Top Poster Presenter**.

UNDER-REVIEWED

- Sunho Lim, Ingyu Lee, Gyu Sang Choi, Jinseok Chae, and Cong Pu*, FastPlan: An Accelerated Points-of-Interest Clustering and Path Planning Framework for Autonomous and Mission-Oriented Drones, Submitted to Journal

BOOK CHAPTER AND EDITORIAL

1. Sunho Lim, Cong Pu*, Jinseok Chae, Manki Min, and Yi Liu, Hide-and-Detect: Forwarding Misbehaviors, Attacks, and Countermeasures in Energy Harvesting-Motivated Networks, Book chapter in IET book entitled "Energy Harvesting in Wireless Sensor Networks and Internet of Things", IET Press (London, UK), 2021
2. Lin Xing*, Wei Wang, Sunho Lim, Onyeka Ezenwoye, Kun Hua, Multimedia Streaming Over Mobile Networks, In The Future of Wireless Networks: Architectures, Protocols, and Services, Book Chapter, CRC Press, Feb 2015
3. Dong Seong Kim, Sunho Lim, and Wensheng Zhang, Editorial: Dependability and Security for Wireless Ad Hoc and Sensor Networks and Their Applications, International Journal of Distributed Sensor Networks, Vol. 2013, July 2013 (IF: 0.727)
4. Sunho Lim, Chansu Yu, and Chita R. Das, Randomized Overhearing to Improve Routing and Energy Performance in Mobile Ad Hoc Networks, In Performance Analysis of Mobile and Ad Hoc Networks, Chapter 6, pp. 115-134, Nova Science Publishers Inc., Nov 2006

PEER-REVIEWED JOURNAL

5. Cong Pu*, Haleigh Zerkle, Andrew Wall, Sunho Lim, Kim-Kwang Raymond Choo, and Imtiaz Ahmed, A Lightweight and Anonymous Authentication and Key Agreement Protocol for Wireless Body Area Networks, IEEE Internet of Things Journal, 2022 (IF: 9.936)
6. Hema Naga Sai Sudha Jagarlapudi*, Sunho Lim, Jinseok Chae, Gyu Sang Choi, and Cong Pu*, Drone Helps Privacy: Sky Caching Assisted k-Anonymity in Spatial Querying, IEEE Systems Journal, 2022 (IF: 3.931)
7. Cong Pu*, Andrew Wall, Kim-Kwang Raymond Choo, Imtiaz Ahmed, and Sunho Lim, A Lightweight and Privacy-Preserving Mutual Authentication and Key Agreement Protocol for Internet of Drones Environment, IEEE Internet of Things Journal, 2022 (IF: 9.936)
8. Samhith Reddy Chinthi-Reddy*, Sunho Lim, Gyu Sang Choi, Jinseok Chae, and Cong Pu*, DarkSky: Privacy-Preserving Target Tracking Strategies Using a Flying Drone, Vehicular Communications, 35 (2022), Elsevier, Jun 2022 (IF: 6.91)

9. Byungkwan Jung*, Sunho Lim, Jinseok Chae, Cong Pu*, and Manki Min, MQry: Elastic Validity Region for Querying Mobile Point-of-Interests in Infrastructure-less Networks, IEEE Systems Journal, Vol. 14, No. 2, pp. 1852 - 1861, Jun 2020 (IF: 4.463)
10. Cong Pu*, Sunho Lim, Jinseok Chae, and Byungkwan Jung*, Active Detection in Mitigating Routing Misbehavior for MANETs, Wireless Networks, Vol. 25, No. 4, pp. 1669 - 1683, Springer, 2019 (IF: 2.405)
11. Namgu Kwon, Jibum Kim, Sunho Lim, Jinseok Chae, and Heemin Park, T-Reduce: Routes-Aware Mobile Trajectory Data Reduction in Transportation Management Systems, IEEE Access, 6(1), pp. 38934 - 38946, Dec 2018 (IF: 3.557)
12. Cong Pu*, Sunho Lim, Jinseok Chae, and Byungkwan Jung*, EYES: Mitigating Forwarding Misbehavior in Energy Harvesting Motivated Networks, Computer Communications, Elsevier, 2018 (IF: 3.338)
13. Cong Pu* and Sunho Lim, A Light-Weight Countermeasure to Forwarding Misbehavior in Wireless Sensor Networks: Design, Analysis, and Evaluation, IEEE Systems Journal, Vol. 12, No. 1, pp. 834 - 842, 2018 (IF: 3.882)
14. Byungkwan Jung*, Sunho Lim, Jinseok Chae, and Cong Pu*, VRSense: Validity Region Sensitive Query Processing Strategies for Static and Mobile Point-of-Interests in Mobile Ad Hoc Netwoks, Computer Communications, Elsevier, 2018 (IF: 3.338)
15. Chunchao Liang*, Sunho Lim, Manki Min, and Wei Wang, Pseudo Geometric Broadcast Protocols in Wireless Sensor Networks: Design, Evaluation, and Analysis, Computer Communications, 101 (2017), pp. 82 - 93, Elsevier, Mar 2017 (IF: 3.338)
16. Sunho Lim, Yumin Lee*, Jongpil Cheon, Manki Min, and Wei Wang, User-defined Consistency Sensitive Cache Invalidation Strategies for Wireless Data Access, Computer Communications, 41 (2014), pp. 55 - 66, Elsevier, Jan 2014 (IF: 1.079)
17. Jongpil Cheon, F. Coward, Jaeki. Song, and Sunho Lim, Factors predicting pre-service teachers' adoption of web 2.0 technologies, Research in the Schools, 19(2), 17 - 29, 2013
18. Sunho Lim, Chansu Yu, and Chita R. Das, Cache Invalidation Strategies for Internet-based Vehicular Ad Hoc Networks, Computer Communications, Vol. 35, No. 3, pp. 380 - 391, Elsevier, Feb 2012 (IF: 1.079)
19. Sunho Lim and Soo-Hoan Chae, On Improving Robustness in Partitionable Internet-based Mobile Ad Hoc Networks, Computing And Informatics Journal - Special Issue on Intelligent Multimedia System and Data Management for Ubi-Com, Vol. 30, No. 3, pp. 429 - 449, Jun 2011 (IF: 0.254)
20. Sunghyuck Hong, Sunho Lim, and Jaeki Song, Unified Modeling Language based Analysis of Security Attacks in Wireless Sensor Networks: A Survey, KSII Transactions on Internet and Information Systems (TISS), Vol. 5, No. 4, pp. 805 - 821, Apr 2011 (IF: 0.560)
21. Sunho Lim, Chansu Yu, and Chita R. Das, A Realistic Mobility Model for Wireless Networks of Scale-Free Node Connectivity, International Journal of Mobile Communications (IJMC), Vol. 8, No. 3, pp. 351 - 369, 2010 (IF: 0.940)
22. Sunho Lim, Chansu Yu, and Chita R. Das, RandomCast: An Energy Efficient Communication Scheme for Mobile Ad Hoc Networks, IEEE Transactions on Mobile Computing (TMC), Vol. 8, No. 8, pp. 1039 - 1051, Aug 2009 (IF: 2.283)
23. Sunho Lim, Wang-Chien Lee, Guohong Cao, and Chita R. Das, Cache Invalidation Strategies for Internet-based Mobile Ad Hoc Networks, Computer Communications, Vol. 30, Issue 8, pp. 1854 - 1869, Elsevier, Jun 2007 (IF: 1.079)
24. Sunho Lim, Wang-Chien Lee, Guohong Cao, and Chita R. Das, A Novel Cache Scheme for Improving Internet-based Mobile Ad Hoc Networks Performance, Ad Hoc Networks, Volume 4, Issue 2, pp. 225 - 239, Elsevier, Mar 2006 (IF: 1.456)
25. Sunho Lim, Guohong Cao, and Chita R. Das, A Unified Bandwidth Reservation and Admission Control Mechanism for QoS Provisioning in Cellular Networks, Journal of Wireless Communications and Mobile Computing (Special Issue on Performance Evaluation of Wireless Networks), Wiley & Sons, Vol. 4, No. 1, pp. 3 - 18, Feb 2004 (IF: 0.863)
26. Sunho Lim, Jongsung Lee, and Soohoan Chae, Task Allocation Algorithm for Heterogeneous Multiprocessor Systems Using Heuristic Technique, Journal of Korea Information Processing Society, Vol.6, No.4, Apr 1999

27. Sunho Lim, Jongsung Lee, Soohoan Chae, and Sungdo Chi, A GA-based Task Allocation Algorithm in the Heterogeneous Multiprocessor Systems, Journal of Korea Information Science Society (A): Computer Systems and Theory, Vol. 25, No. 8, pp. 845 - 856, Aug 1998

Peer-reviewed Conference and Workshop

28. Manki Min and Sunho Lim, Congestion-minimal and Traffic-adaptive Platooning Evacuation, IEEE Systems Conference (SysCon), Aug 2020
29. Cong Pu*, Xitong Zhou, and Sunho Lim, Mitigating Suppression Attack in Multicast Protocol for Low Power and Lossy Networks, IEEE Local Computer Networks (LCN), Oct 2018
30. Manki Min, Sunho Lim, Yi Liu, and Hyeun Joong Yoon, Authentication Pedigree Scheme for Supply Chain, IEEE Systems Conference (SysCon), Apr 2018
31. Cong Pu*, Sunho Lim, Byungkwan Jung*, and Manki Min, Mitigating Stealthy Collision Attack in Energy Harvesting Motivated Networks, IEEE Military Communications Conference (MILCOM) – Track 3. Cyber Security and Trusted Computing, Oct 2017
32. Manki Min and Sunho Lim, Segmented Arrival Graph based Evacuation Plan Assessment Algorithm Using Linear Programming, IEEE Systems Conference (SysCon), Apr 2017
33. Byungkwan Jung*, Sunho Lim, Jinseok Chae, and Cong Pu*, Validity Region Sensitive Query Processing Strategies in Mobile Ad Hoc Networks, IEEE Military Communications Conference (MILCOM) - Track 2. Networking Protocols and Performance, Nov 2016 (**MILCOM 2016 Travel Grant Award**)
34. Nishaben Patel, Manki Min, and Sunho Lim, Accurate Evacuation Route Planning Using Forward-Backward Shortest Paths, IEEE Systems Conference (SysCon), Apr 2016
35. Chunchao Liang*, Sunho Lim, Manki Min, and Wei Wang, TCast: A Transitional Region Aware Broadcast Protocol in Variable Wireless Link Qualities, IEEE Consumer Communications & Networking Conference (CCNC) - Wireless Networking and Mobility, Jan 2016
36. Cong Pu* and Sunho Lim, Spy vs. Spy: Camouflage-based Active Detection in Energy Harvesting Motivated Networks, IEEE Military Communications Conference (MILCOM) - Track 3: Cyber Security and Trusted Computing, Oct 2015 (**MILCOM 2015 Travel Grant Award**)
37. Sunho Lim and Lauren Huie, Hop-by-Hop Cooperative Detection of Selective Forwarding Attacks in Energy Harvesting Wireless Sensor Networks, International Workshop on Computing, Networking and Communications (CNC) in conjunction with International Conference on Computing, Networking and Communications (ICNC), Feb 2015
38. Chunchao Liang*, Sunho Lim, Manki Min, and Wei Wang, Network Coverage Sensitive Pseudo Geometric Broadcast Protocols in Wireless Sensor Networks, In IEEE Consumer Communications & Networking Conference (CCNC) - Wireless Networking and Mobility, Jan 2015
39. Manki Min, Jonguk Lee, and Sunho Lim, Effective evacuation route planning algorithms by updating earliest arrival time of multiple paths, 3rd ACM SIGSPATIAL International Workshop on Mobile Geographic Information Systems (MobiGIS) in conjunction with the 22nd ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS), Nov 2014
40. Cong Pu*, Tejaswi Gade*, Sunho Lim, Manki Min, and Wei Wang, Light-Weight Forwarding Protocols in Energy Harvesting Wireless Sensor Networks, IEEE Military Communications Conference (MILCOM) – Track 3. Networking: Architectures, Management, Protocols and Performance, Oct 2014 (**MILCOM 2014 Travel Grant Award**)
41. Chunchao Liang*, Sunho Lim, Manki Min, and Wei Wang, Geometric Broadcast Without GPS Support in Dense Wireless Sensor Networks, IEEE Consumer Communications & Networking Conference (CCNC) – Smart Spaces and Wireless Networks, pp. 696 – 701, Jan 2014 (Acceptance rate, 93 / 271 $\sim$ 29%)
42. Runan Yao, Wei Wang, Kezem Sohraby, Shi Jin, Sunho Lim, and Zhu Hongbo, A Weight-Optimized Source Rate Optimization in Energy Harvesting Wireless Sensor Networks, IEEE Global Communications Conference (GLOBECOM 2012) – Communications QoS, Reliability and Modeling Symposium, Dec 2012
43. Sungwon Chung, Jongpil Cheon, Sunho Lim, and H. Son, The interaction effect between emotional valence and arousal on online learning from a motivated cognition perspective, Annual Convention of the Association for Educational Communications and Technology, Oct 2012

44. Jongpil Cheon, Steven M. Crooks, Sungwon Chung, and Sunho Lim, Does the segmenting principle counteract the modality principle in multimedia instruction?, Annual Convention of the Association for Educational Communications and Technology, Oct 2012
45. Jongpil Cheon, Sangno Lee, Steven M. Crooks, and Sunho Lim, An Investigation of Mobile Learning Readiness in Higher Education based on the Theory of Planned Behavior, 2012 Annual Meeting, American Educational Research Association (AERA), Apr 2012 (**Special Interest Group – Instructional Technology (SIG-IT) Best Paper Award**)
46. Sunho Lim, Yumin Lee*, and Manki Min, ConSens: Consistency-Sensitive Opportunistic Data Access in Wireless Networks, Military Communications Conference (MILCOM 2011) – Track 2: Network Protocols and Performance, pp. 804 - 809, Nov 2011
47. Sunho Lim, Jung-Han Kimn, and Hyeoungwoo Kim, Analysis of Energy Harvesting for Vibration-Motivated Wireless Sensor Networks, International Conference on Wireless Networks (ICWN 2010, Regular Research Paper), pp. 391- 397, Jul 2010
48. Sunghyuck Hong and Sunho Lim, On Biometric Enabled X.509 Certificate, International Conference on Information Security and Privacy (ISP), Jul 2010
49. Sunghyuck Hong and Sunho Lim, Analysis of Attack Models via Unified Modeling Language in Wireless Sensor Networks: A Survey Study, IEEE International Conference on Wireless Communications, Networking and Information Security (WCNIS), pp. 692 - 696, Jun 2010
50. Sunho Lim, Chansu Yu, and Chita R. Das, Cooperative Cache Invalidation Strategies for Internet-based Vehicular Ad Hoc Networks, IEEE International Conference on Computer Communications and Networks (ICCCN 2009), pp. 1 - 6, Aug 2009 (Acceptance rate, 115 / 387 $\sim$ 29%)
51. Sunho Lim, Soo-Hoan Chae, Chansu Yu, and Chita R. Das, On Cache Invalidation for Internet-based Vehicular Ad Hoc Networks, The 2nd International Workshop on Mobile Vehicular Networks (MoVeNet 2008), Sept 2008, Atlanta
52. Sunho Lim, Chansu Yu, and Chita R. Das, Clustered Mobility Model for Scale-Free Wireless Networks, The 31st IEEE Conference on Local Computer Networks (LCN), Nov 2006 (Acceptance rate, 62 / 183 $\sim$ 34%)
53. Sunho Lim, Chansu Yu, and Chita R. Das, Rcast: A Communication Scheme for Improving Energy Efficiency in Manets, The 25th International Conference on Distributed Computing Systems (ICDCS 2005), pp. 123-132, Jun 2005 (Acceptance rate $\sim$ 14.3%)
54. Sunho Lim, Wang-Chien Lee, Guohong Cao, and Chita R. Das, Performance Comparison of Cache Invalidation Strategies for Internet-based Mobile Ad Hoc Networks, IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2004), pp. 104-113, Oct 2004 (Acceptance rate $\sim$ 25%, **Best Paper Candidate**)
55. Sunho Lim, Wang-Chien Lee, Guohong Cao, and Chita R. Das, A Novel Caching Scheme for Internet based Mobile Ad Hoc Networks, The International Conference on Computer Communications and Networks (ICCCN 2003), pp. 38-43, Oct 2003
56. Sunho Lim, Seung-Taek Park, Wang-Chien Lee, Guohong Cao, Chita R. Das, and C. Lee Giles, A Caching Mechanism for Improving Internet based Mobile Ad Hoc Networks Performance, The International World Wide Web Conference (WWW 2003), May 2003 (Short Paper)
57. Sunho Lim, Guohong Cao, and Chita R. Das, An Admission Control Scheme for QoS-Sensitive Cellular Networks, IEEE Wireless Communications and Networking Conference (WCNC 2002), pp. 296-300, Mar 2002
58. Sunho Lim, Guohong Cao, and Chita R. Das, A Differential Bandwidth Reservation Policy for Multimedia Wireless Networks, The International Conference on Parallel Processing (ICPP 2001) Workshops on Wireless Networks and Mobile Computing (WNMC), pp.447-452, Sept 2001
59. Sunho Lim, Jongsung Lee, Soohoan Chae, and Sungdo Chi, Using the Genetic Algorithm to Develop the Task Allocation Algorithm for Heterogeneous Multiprocessor Systems, Korea Information Science Society Fall Conference, 1997
60. Sunho Lim, Jongsung Lee, and Soohoan Chae, Heuristic Task Allocation Algorithm for Heterogeneous Multiprocessor Systems, Korea Information Science Society Fall Conference, 1997

Technical Poster

61. Clinton Beasley*, Joshua S. Williams*, Zachary Brasuell*, Sunho Lim, Micahel Shin, SMARTx: An Embedded Proximity Detection System for Reducing Collisions, Undergraduate Research Conference 2015, Texas Tech University, Apr 2015 (*: Equally contributed)
62. Chunchao Liang*, Sunho Lim, Manki Min, and Wei Wang, To Broadcast or Not to Broadcast: Efficient Pseudo Geometric Broadcast Protocols in Resource-Constrained Wireless Networks, Annual Graduate Student Research Poster Competition, Texas Tech University, Mar 2015
63. Cong Pu*, Sunho Lim and Lauren Huie, Combating Selective Forwarding Attacks: A Checkpoint-Based Countermeasure in Energy Harvesting-Motivated Networks, Annual Graduate Student Research Poster Competition, Texas Tech University, Mar 2015
64. Jacob G. Crabtree*, Joshua S. Williams*, Nicholas D. Marler*, Matthew R. Gattis*, and Sunho Lim, Intel Galileo Development Board based Embedded Applications, Undergraduate Research Conference 2014, Texas Tech University, Apr 2014 (*: Equally contributed, **2014 TTU Undergraduate Research Conference Award – Top Poster Presenter**)
65. Ashok A. Sinha*, Sunho Lim, Jongpil Cheon, and Walter S. Smith, Designing and Developing a Mobile Moon Observation App, Undergraduate Research Conference 2014, Texas Tech University, Apr 2014
66. Sunho Lim and Lauren Huie, Detection of Selective Forwarding Attacks in Energy Harvesting Wireless Sensor Networks, Air Force Research Laboratory, Rome NY, July 2013
67. Andrew C. Richardson*, Yadav Chaulagain*, Sunho Lim, and Jongpil Cheon, VoiceBB: Design and Development of Android Software for Voice-supported Bulletin Board, Undergraduate Research Conference 2012, Texas Tech University, Apr 2012 (*: Equally contributed)
68. Yumin Lee* and Sunho Lim, A User-defined Probabilistic Data Consistency = Opportunistic Data Access + Lazy Request, Annual Graduate Student Research Poster Competition, Texas Tech University, Mar 2012

Technical Report

69. Bitao Peng, Sunho Lim, Byungkwan Jung*, Cong Pu*, Xinying Qiu, and Manki Min, Probabilistic Cooperative Caching-Based Content Subscribing in Opportunistic Mobile Networks, TTU Wireless Mobile Networking Laboratory, TR-01-2017, Department of Computer Science, Texas Tech University, Jan 2017
70. Tejaswi Gade*, Sunho Lim, Manki Min, and Wei Wang, Acknowledgment Strategies for Asymmetric Routing in Energy Harvesting Wireless Sensor Networks, TTU Wireless Mobile Networking Laboratory, Technical Report, TR-11-2013, Department of Computer Science, Texas Tech University, Nov 2013
71. Cong Pu*, Sunho Lim, and Manki Min, Evacuation Assisting Strategies in Vehicular Ad Hoc Networks, TTU Wireless Mobile Networking Laboratory, Technical Report, TR-10-2013, Department of Computer Science, Texas Tech University Oct 2013
72. Sunho Lim, Jung-Han Kimn, and Hyeoungwoo Kim, A Study on Energy Harvesting Aware Routing for Vibration-Motivated Wireless Sensor Networks, TTU Wireless Mobile Networking Laboratory, Technical Report, TR-02-2010, Department of Computer Science, Texas Tech University, Feb 2010
73. Sunho Lim, Jung-Han Kimn, and Hyeoungwoo Kim, Analysis of Vibration-based Energy Harvest for Wireless Sensor Networks, Technical Report TR-EECS-03-2009, Department of Electrical Engineering and Computer Science, South Dakota State University, Brookings, SD, March 2009
74. Sunho Lim, A Location Management Integrated Cache Invalidation Scheme for Internet-based Vehicular Ad Hoc Networks, Technical Report TR-EECS-07-2008, Department of Electrical Engineering and Computer Science, South Dakota State University, Brookings, SD, Jul 2008
75. Sunho Lim, Medium Access Control Schemes for Vehicular Ad Hoc Networks: A Survey Study, Technical Report TR-EECS-09-2007, Department of Electrical Engineering and Computer Science, South Dakota State University, Brookings, SD, Sept 2007
76. Sunho Lim, Wang-Chien Lee, and Chita R. Das, Improving the Robustness of Partitionable Internet based Mobile Ad Hoc Networks through Caching, Technical Report TR-EECS-06-2007, Department of Electrical Engineering and Computer Science, South Dakota State University, Brookings, SD, Jun 2006
77. Sunho Lim, Chansu Yu, and Chita R. Das, Topological Properties of Scale-Free Wireless Networks, Technical Report TR-EECS-11-2005, Department of Electrical Engineering and Computer Science, South Dakota State University, Brookings, SD, Nov 2005

78. Sunho Lim, Wang-Chien Lee, Guohong Cao, and Chita R. Das, Cache Invalidation Strategies for Internet-based Mobile Ad Hoc Networks (IMANETs), Technical Report CSE-04-011, Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, Apr 2004
79. Sunho Lim, Seung-Taek Park, Wang-Chien Lee, Guohong Cao, Chita R. Das, and C. Lee Giles, An Aggregate Caching for Internet based Mobile Ad Hoc Networks, Technical Report CSE-02-017, Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, Oct 2002
80. Sunho Lim, Guohong Cao, and Chita R. Das, A QoS-Aware Admission Control Scheme for Cellular Wireless Networks, Technical Report CSE-01-033, Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, Nov 2001
81. Sunho Lim, Guohong Cao, and Chita R. Das, Performance Evaluation of A Differential Bandwidth Reservation Policy for Multimedia Wireless Networks, Technical Report CSE-01-015, Department of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, May 2001

Other

82. Sunho Lim, Design and Analysis of Wireless and Mobile Networks, Ph.D. Dissertation, Dept. of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, Aug 2005
83. Sunho Lim, Design and Analysis of Wireless and Mobile Networks, Ph.D. Dissertation Proposal, Dept. of Computer Science and Engineering, The Pennsylvania State University, University Park, PA, Mar 2003
84. Sunho Lim, Efficient Task Allocation Algorithm for Heterogeneous Multiprocessor Systems. M.S. Thesis, Dept. of Computer Engineering, Hankuk Aviation University (a.k.a., Korea Aerospace University), Korea, Feb 1998

Talks/Seminars/Tutorials/Panels

1. Sunho Lim, VRSense: Validity Region Sensitive Query Processing Strategies for Static and Mobile Point-of-Interests in MANETs, S&T Colloquium, Space and Naval Warfare Center Atlantic, July 2018
2. Sunho Lim, Special Topics in Wireless Networks and Mobile Computing, Technical Tutorial, Space and Naval Warfare Center Atlantic, June – July 2018 (4 times)
3. Sunho Lim, Exploring Wireless Mobile Peer-to-Peer Networks: Issues, Challenges, and Approaches, S&T Colloquium, Space and Naval Warfare Center Atlantic, July 2017
4. Sunho Lim, Accelerated Computer Networks Course, Space and Naval Warfare Center Atlantic, June – July 2017 (4 weeks and 3 hours/week)
5. Sunho Lim, DoS Attack and Its Countermeasure in Energy-Constrained Wireless Networks, Texas Tech University NSF-Supported Faculty Workshop on Cybersecurity for Critical Infrastructure, Apr 2015
6. Sunho Lim, Whitacre College of Engineering Panel – Interdisciplinary Cybersecurity Education, Texas Tech University NSF-Supported Faculty Workshop on Cybersecurity for Critical Infrastructure, May 2013
7. Sunho Lim, Whitacre College of Engineering Panel – Interdisciplinary Cybersecurity Education, Texas Tech University NSF-Supported Faculty Workshop on Cybersecurity for Critical Infrastructure, Nov 2012
8. Sunho Lim, When Dynamic Source Routing meets IEEE 802.11 Power Saving Mode, U_REaSON Seminar, Dept. of Computer Science, Texas Tech University, Nov 2011
9. Sunho Lim, Exploring Wireless Mobile Peer-to-Peer Network and Its Applications, School of Electronics, Telecommunication & Computer Engineering, Hankuk Aviation University (a.k.a., Korea Aerospace University), Nov 2011 (Video Conference)

Teaching Experience

- I have been teaching diverse courses for **16+ years** in Computer Science and Software Engineering programs in multiple institutions. I was nominated as a **Texas Tech Parent Association Hemphill-Wells New Professor Excellence in Teaching Award** at Texas Tech University. I was a recipient of the **Best Graduate Teaching Assistant Award** of the Dept. of Computer Science and Engineering, and had a certificate of **Schreyer Institute for Teaching Excellence** from The Pennsylvania State University. I also had a teaching certificate from South Dakota State University. I was selected as a **STEM Teaching, Engagement & Pedagogy (STEP) Program Faculty Fellow** in Teaching, Learning & Professioinal Development Center and focused on the practice of teaching and improving student outcomes. I am a **TTU Teaching Academy Member**.

Instructor (Ph.D., Assistant Professor, Texas Tech University)

1. CS2350: Computer Organization and Assembly Language Programming (S12, F12, F13, F14, F20)
2. CS2413: Data Structure (F17, F21)
3. CS3352: Introduction to Systems Programming (F11)
4. CS3375: Computer Architecture (F15, F18, F19, S20, S21)
5. CS4000: Individual Studies in Computer Science (S12, S14, F14, S15, S18)
6. CS4331: Embedded Systems (Newly developed course) (S13, S14)
7. CS4331/5331: Opportunistic Mobile Networks (Newly developed course) (F12)
8. CS4331/5331: Mobile Data Management and Privacy (Newly developed course) (Su19)
9. CS4331/5331: Network Security (Newly developed course) (Su20)
10. CS4331/5331: Wireless Networks and Mobile Computing (Newly developed course) (Su20)
11. CS4366: Senior Capstone Project (S16, S17, F17, S18, F18, S19, F19, S20, F20, S21)
12. CS4392: Computer Networks (F11, F15, F16, F17, F18, F20, Su21)
13. CS5331: Wireless Mobile P2P Networks (Newly developed course) (F09)
14. CS5331: Wireless Network and Mobile Computing (Newly developed course) (Su12, F14, F21)
15. CS5331: Internet of Things (IoT) and Its Application (Newly developed course) (Su15)
16. CS5331: Mobile Data Management (Newly developed course) (Su16)
17. CS5376: Communication Networks (S10, S11, S12, S17, S18, F19, Su21)
18. CS5377: Distributed Computing (F10, F15, F16, S19)

Instructor (Ph.D., Assistant Professor, South Dakota State University)

19. CSC218: Intro C/C++/Unix for Engineer (F05, S06)
20. SE270: Foundation of Software Engineering (S07)
21. CSC317: Computer Organization and Architecture (S06, S07, S08, S09)
22. SE330: Human Factors and User Interface (F05, F06, F07, F08)
23. SE440: Embedded Systems Programming (Newly developed course) (F06, F07, F09)
24. SE464: Senior Design I (F06)
25. SE492/592: Wireless Networks and Mobile Computing (Newly developed course) (S07)
26. CSC592: Accelerated Computer Science Fundamental (Newly developed course) (F08)

Instructor (Ph.D. Student, The Pennsylvania State University)

27. CMPSC201F: Computer Programming for Engineer (F00, S01, F01, S02, S05)
28. CSE271: Introduction to Digital Systems (F04)

Graduate TA (Ph.D. Student, The Pennsylvania State University)

29. CSE471: Logical Design of Digital Systems (F98, S99, S00)

Instructor (M.S. Student, Hankuk Aviation University)

30. Pascal Programming (F96)

Teaching Effectiveness

- Student evaluations (5.0 scale) for the last 12 years at Texas Tech University are summarized: (i) The course objectives were specified and followed by the instructor; (ii) Overall, this instructor was effective teacher (†Lecture Rating); (iii) Overall, this course was a valuable learning experience (§Subject Rating); and (iv) Number of undergraduate and graduate students.
  - †Lecture Rating: Overall this instructor was effective
  - §Subject Rating: Overall this course was a valuable learning experience
- Fall 2021, CS2413/5301: Data Structures (**4.7**, †**4.74**, §**4.72**, Under (92), Grad (16))
- Fall 2021, CS4331/5331: Wireless Networks and Mobile Computing (**4.73**, †**4.73**, §**4.7**, Under (21), Grad (75))
- Summer 2021, CS4392/5376: Computer Networks & Communication Networks (**4.63**, †**4.7**, §**4.56**, Under (37), Grad (48)) – Online due to Covid-19
- Summer 2021, CS4331/5331: Network Security (**4.4**, †**4.46**, §**4.5**, Under (30), Grad (36)) – Online due to Covid-19
- Spring 2021, CS3375: Computer Architecture (**4.3**, †**4.3**, §**4.3**, Under (94)) – Online due to Covid-19
- Spring 2021, CS4366: Senior Capstone Project (**4.69**, †**4.47**, §**4.43**, Under (102)) – Online due to Covid-19
- Fall 2020, CS2350: Computer Organization and Assembly Language Programming (**4.08**, †**4.16**, §**4.54**, Under (87)) – Online due to Covid-19
- Fall 2020, CS4366: Senior Capstone Project (**4.55**, †**4.63**, §**4.68**, Under (78)) – Online due to Covid-19
- Fall 2020, CS4392: Computer Networks (**4.53**, †**4.61**, §**4.61**, Under (121)) – Online due to Covid-19
- Summer 2020, CS4331/5331: Network Security (**4.45**, †**4.67**, §**4.61**, Under (16), Grad (29)) – Online due to Covid-19
- Summer 2020, CS4331/5331: Network Security (**4.75**, †**4.83**, §**4.85**, Under (24), Grad (49)) – Online due to Covid-19
- Spring 2020, CS3375: Computer Architecture (**4.75**, †**4.68**, §**4.58**, Under (97)) – Online due to Covid-19
- Spring 2020, CS4366: Senior Capstone Project (**4.89**, †**4.85**, §**4.79**, Under (73)) – Online due to Covid-19
- Fall 2019, CS3375: Computer Architecture (**4.79**, †**4.74**, §**4.56**, Under (98))
- Fall 2019, CS4366: Senior Capstone Project (**4.77**, †**4.77**, §**4.59**, Under (46))
- Fall 2019, CS5376: Communication Networks (**4.78**, †**4.88**, §**4.67**, Grad (32))
- Summer 2019, CS4331/5331: Mobile Data Management and Privacy (**4.85**, †**4.9**, §**4.65**, Under(8), Grad (22))
- Spring 2019, CS4366: Senior Capstone Project (**4.85**, †**4.81**, §**4.81**, Under (75))
- Spring 2019, CS5377: Distributed Systems (**4.60**, †**4.60**, §**4.33**, Grad (24))
- Fall 2018, CS3375: Computer Architecture (**4.84**, †**4.77**, §**4.64**, Under (99))
- Fall 2018, CS4366: Senior Capstone Project (**4.96**, †**4.87**, §**4.87**, Under (42))
- Fall 2018, CS4392: Computer Networks (**4.86**, †**4.86**, §**4.75**, Under (60))
- Spring 2018, CS4366: Senior Capstone Project (**4.91**, †**4.69**, §**4.83**, Under (50))
- Spring 2018, CS5376: Communication Networks (**4.82**, †**4.82**, §**4.77**, Grad (24))
- Fall 2017, CS2413: Data Structure (**4.38**, †**4.31**, §**4.37**, Under (60))
- Fall 2017, CS4366: Senior Capstone Project (**4.83**, †**4.83**, §**4.33**, Under (28))

- Fall 2017, CS4392: Computer Networks (**4.85**, †**4.70**, §**4.75**, Under (47))
- Spring 2017, CS4366: Senior Capstone Project (**4.92**, †**4.92**, §**4.92**, Under (33))
- Spring 2017, CS5376: Communication Networks (**5.0**, †**5.0**, §**5.0**, Grad (9))
- Fall 2016, CS4392: Computer Networks (†**4.71**, §**4.60**, Under (32))
- Fall 2016, CS5377: Distributed Systems (†**4.63**, §**4.69**, Under (18))
- Spring 2016, CS4366: Senior Capstone Project (†**4.74**, §**4.57**, Under (33))
- Fall 2015, CS4392: Computer Networks (†**4.82**, §**4.71**, Under (39))
- Fall 2015, CS5377: Distributed Computing (†**4.63**, §**4.56**, Under (1), Grad (33))
- Spring 2015, CS3375: Computer Architecture (†**4.67**, §**4.36**, Under (45))
- Fall 2014, CS2350: Computer Organization and Assembly Language Programming (†**4.82**, §**4.77**, Under (27))
- Fall 2014, CS5331: Wireless Networks and Mobile Computing (†**4.91**, §**4.86**, Grad (29))
- Spring 2014, CS4331: Embedded Systems (†**5.0**, §**4.5**, Under (11))
- Fall 2013, CS2350: Computer Organization and Assembly Language Programming (†**4.80**, §**4.55**, Under (26))
- Spring 2013, CS4331: Embedded Systems (†**4.67**, §**4.67**, Under (18))
- Fall 2012, CS2350: Computer Organization and Assembly Language Programming (†**4.81**, §**4.62**, Under (40))
- Fall 2012, CS4331/5331: Opportunistic Mobile Networks (†**5.0**, §**5.0**, Under (1)/Grad (9))
- Spring 2012, CS2350: Computer Organization and Assembly Language Programming (†**4.71**, §**4.68**, Under (35))
- Spring 2012, CS5376: Communication Networks (†**5.0**, §**4.55**, Grad (10))
- Fall 2011, CS3352: Introduction to Systems Programming (†**4.5**, §**4.6**, Under (35))
- Fall 2011, CS4392: Computer Networks (†**4.63**, §**5.0**, Under (14))
- Spring 2011, CS5376: Communication Networks (†**4.6**, §**4.55**, Grad (21))
- Fall 2010, CS5377: Distributed Computing (†**4.41**, §**4.24**, Grad (27))
- Spring 2010, CS5376: Communication Networks (†**4.86**, §**4.71**, Grad (15))
- Fall 2009, CS5331: Wireless Mobile P2P Networks (†**4.83**, §**4.61**, Grad (20))

Supervision of Student/Visiting Scholar Research

Graduated Student

1. Hema Naga Sai Sudha Jagarlapudi (M.S., Spring 2021)
   Thesis: Sky Caching Assisted k-Anonymity in Spatial Querying
2. Samhith Reddy Chinthi-Reddy (M.S., Spring 2021)
   Thesis: Privacy Preserving Target Tracking Strategies using a Flying Drone
3. Byungkwan Jung (Ph.D., Summer 2019), Tenure-track Assistant Professor at Troy University
   Dissertation: Region-Aware Querying Strategies in Infrastructure-less Networks: Design, Analysis, and Evaluation
4. Cong Pu (Ph.D., Summer 2016), Tenure-track Assistant Professor at Marshall University
   Dissertation: A Holistic Approach to the Exploitation of Energy Harvesting Motivated Networks: Protocols and Countermeasures to DoS Attacks
5. Chunchao Liang (Ph.D., Spring 2016), Tenure-track Assistant Professor at Eastern New Mexico University
   Dissertation: Towards Scalable and Realistic Data Dissemination in Resource-Constrained Wireless Networks

6. Srikanth Varanasi (M.S., Spring 2016)
   Thesis: Weak Cache Consistency Driven Data Access Schemes in Wireless Networks
7. Swaroop Kagli (M.S., Spring 2016)
   Thesis: Cooperative Cache based k-anonymity for Enhancing Location Privacy
8. Chunchao Liang (M.S., Summer 2013)
   Thesis: A Non-Geometric Broadcast Scheme in Dense Wireless Sensor Networks
9. Cong Pu (M.S., Summer 2013)
   Thesis: On Evacuation Assisting Vehicular Ad Hoc Networks
10. Tejaswi Gade (M.S., Spring 2013)
    Thesis: Acknowledgment Strategies for Efficient Asymmetric Routing in Energy Harvesting Wireless Sensor Networks
11. Amit Gosavi (M.S., Summer 2012)
    Thesis: An Energy Harvesting Aware Data Dissemination Strategy for Energy Rechargeable Wireless Sensor Networks
12. Devaraj Adimurthy (M.S., Spring 2012)
    Project: A Study of Cooperating MAC and Routing Protocols for Ad hoc Wireless Networks
13. Deepika Murali (M.S., Spring 2012)
    Thesis: An Adaptive Gossip Protocol for Improving Communication Performance in Wireless Sensor Networks
14. Yumin Lee (M.S., Fall 2011)
    Thesis: A User-defined Cache Consistency Scheme for Wireless Networks
15. Sudheer R. Nakkala (M.S., Summer 2011)
    Thesis: An Opportunistic Cooperative Relaying Protocol for Mobile Ad Hoc Networks
16. Raghu R. Shidlagatta Krishnamurthy (M.S., Fall 2010)
    Project: A Study of Probabilistic Broadcast Schemes in Wireless Sensor Networks

Undergraduate Student

18. Reynaldo Garcia (CS4000, Spring 2018)
    Project: A Simple Intel Galileo-based Embedded Web Server and Its Application
19. Joshua S. Williams (CS4000, Spring 2015)
    Project: SMARTx: An Embedded Proximity Detection System for Reducing Collisions
20. James Estrada and Aashish Regmi (CS4000, Spring 2015)
    Project: Intel Galileo-based Ubiquitous Embedded Applications
21. Zachary Brasuell and Clinton Beasley (CS4000, Fall 2014)
    Project: SMARTx: An Embedded Proximity Detection System for Reducing Collisions
22. Carl Flory and James Estrada (CS4000, Fall 2014)
    Project: SMARTx: A WiFi-Direct based Software Approach for Reducing Collisions
23. Ashok A. Sinha (CS4000, Spring 2014)
    Project: Design and Development of Android Software for the World Moon Project
24. Jacob G. Crabtree, Joshua S. Williams, Nicholas D. Marler, and Matthew R. Gattis (CS4000, Spring 2014)
    Project: Galileoties: Web-based Computing and Beyond; Intel Galileo Driven Character Display; Writing Audio Functions Using the Intel Galileo Arduino; and Communications via Bluetooth (**TTU Undergraduate Research Conference Award – Top Poster Presenter**)
25. Andrew C. Richardson and Yadav Chaulagain (CS4000, Spring 2012)
    Project: VoiceBB: Design and Development of Android Software for Voice-supported Bulletin Board
26. Derek A. Johnston (NSF Research Experiences for Undergraduates (REU), Summer/Fall 2010)
    Project: Exploring Wireless Networking Techniques Using Android Devices

Visiting Scholar

27. Dr. Jinseok Chae (Prof., Spring 2015 – Summer 2017)
    Dept. of Computer Science and Engineering, Incheon National University, Korea
28. Dr. Bitao Peng (Associate Prof., Spring 2015 – Fall 2016)
    Cisco Schole of Informatics, Guangdong University of Foreign Studies, China

Service Experience

- I have been actively participating in internal/external services and STEM outreach activities. I also have been serving for university and department as a committee member with diverse roles at South Dakota State University and Texas Tech University. I served as a NSF proposal review panel, a guest editor, a technical program committee, and a reviewer of renowned conference and journal. I co-organized STEM outreach activities, **Computer Design Competition**, **Scratch Summer Camp**, and **The STEM Camp: Data Science, Cybersecurity, and Coding**. I also provided a **Professional Development** for elementary school teachers in Dallas Independence School District (DISD, TX).

University Service

- Graduate Dean's Representative
    1. Kyung-Ah (Kay) Byun, Ph.D. Dissertation, "Two Essays on the Effects of Product Recalls on Sales Dynamics and Consumer Loyalty", TTU, May 2014
    2. Mohamed Beloura, Ph.D. Dissertation, "Two-Stage Metascheduling of Grid Workflows", TTU, Mar 2012

Departmental Service

- Dept. of Computer Science, Texas Tech University
    1. Strategic Planning Committee
    2. Graduate Student Support Committee
    3. Graduate Admission Committee
    4. Graduate Program Committee
    5. Undergraduate Program Committee
    6. Faculty Search Committee
    7. Department Seminar (U-REaSON) Coordinator
    8. Department Advisory Committee
    9. IE/CS MSSE Committee
    10. Department Review Committee
    11. Undergraduate/Graduate Curriculum Groups
    12. Undergraduate Program Committee
    13. Research Task Force

- Dept. of Electrical Engineering and Computer Science, South Dakota State University
    1. SDSU Program Design Competition Coordinator
    2. The Graduate Faculty Representative
    3. 5-Year Program Development Committee
    4. Department Standard Writing Committee: Research & Scholarship
    5. Software Engineering Curriculum Development Committee
    6. Software Engineering Undergraduate Advisor
    7. Exchange Program Undergraduate Advisor

8. Software Engineering Faculty Search Committee

Professional Service

- Grant Proposal Reviewer/Panel
  1. CNS NeTS Program, National Science Foundation (NSF)
  2. Technology Commercialization Fund, Department of Energy's (DoE's) Office of Technology Transitions (OTT)
- Guest Editor
  1. A Special Issue: Dependability and Security for Wireless Ad Hoc and Sensor Networks and Their Applications, International Journal of Distributed Sensor Networks, Hindawi
- Technical Program Committee
  1. IEEE Int'l Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)
  2. IEEE Global Communications Conference (GLOBECOM)
  3. IEEE Int'l Conf. on Communications (ICC)
  4. IEEE Int'l Conf. on Computer and Information Technology (CIT)
  5. IEEE Int'l Workshop on Wireless and Sensor Networks Security (WSNS)
  6. ACM Int'l Conference on Reliable and Convergent Systems (RACS)
  7. EAI International Conference on Communications and Networking in China (CHINACOM)
  8. Int'l Symposium on Computer Architecture and High Performance Computing (SBAC–PAD)
  9. Int'l Conf. on Body Area Networks (BodyNet)
  10. Int'l Conf. on Scalable Information Systems (INFOSCALE)
  11. Int'l Conf. on Communication Technology (ICCT)
  12. Int'l Workshop on Pervasive Wireless Networking (PWN)
  13. Int'l Workshop on Sensor Networks (SN)
  14. Int'l Workshop on Mobile Multimedia Networking (IWMMN)
  15. Int'l Congress on Computer Applications and Computational Science (CACS)
- Reviewer
  1. IEEE Transactions on Wireless Communication
  2. ACM Transactions on Sensor Networks
  3. IEEE Transactions on Cloud Computing
  4. IEEE Transactions on Knowledge and Data Engineering
  5. IEEE Access
  6. IEEE Communications Letters
  7. Journal of Wireless Communications and Mobile Computing (Wiley & Sons)
  8. Journal of Computer Communications (Elsevier)
  9. Journal of Performance Evaluation (Elsevier)
  10. Journal of Information Science (Elsevier)
  11. Journal of Wireless Communications and Networking (EURASIP)
  12. Ad Hoc & Sensor Wireless Networks Journal
  13. IEEE Int'l Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC)
  14. IEEE Wireless Communications and Networking Conference (WCNC)
  15. IEEE Int'l Workshop on Wireless and Sensor Networks Security

16. IEEE Int'l Conf. on Communication (ICC)
17. IEEE Global Communications Conference (GLOBECOM)
18. IEEE Int'l Conf. Parallel & Distributed Processing Symposium (IPDPS)
19. IEEE Int'l Conf. on Cloud Computing (CLOUD)
20. IEEE Int'l Conf. on Pervasive Computing and Communications (PerCom)
21. IEEE Int'l Conf. on Computer and Information Technology (CIT)
22. IEEE Online Green Communications Conference
23. ACM Int'l Conference on Reliable and Convergent Systems (RACS)
24. Int'l Conf. on Scalable Information Systems
25. Int'l Conf. on Mobile Data Management (MDM)
26. Int'l Conf. on Parallel Processing (ICPP)
27. Int'l Conf. on Parallel and Distributed Systems (ICPADS)
28. Int'l Conf. on Computer Communications and Networks (ICCCN)
29. Int'l Conf. on Body Area Networks (BodyNet)
30. Int'l Conf. on Communication Technology (ICT)
31. Int'l Symposium on Computer Architecture and High Performance Computing (SBAC–PAD)
32. Int'l Workshop on Sensor Networks (SN)
33. Int'l Congress on Computer Applications and Computational Science (CACS)

- IEEE Senior Member

Outreach Activity and Community Service

- STEM Outreach

1. The STEM Camp: Data Science, Cybersecurity, and Coding (Jun 2019)
   K-12 students residing in Lubbock, TX
   Texas Tech University, TX 79409
2. Professional Development (Summer/Fall 2017)
   Computer science course curriculum development and teacher professional development of elementary school in Dallas Independence School District (DISD), TX
   Texas Tech University, TX 79409
3. Scratch Summer Camp (Jun 2012)
   Under-represented 3rd to 5th graders in Parkway elementary school in Lubbock Independence School District (LISD), TX
   Texas Tech University, TX 79409
4. Program Design Competition (March 2006/2007/2008/2009)
   Middle and high school students residing in SD, ND, and MN
   South Dakota State University, SD 57006

- Community Service

1. President of Korean Catholic Community (Jul 2002 – Jun 2003)
   The Pennsylvania State University, University Park, PA 16802

Certificates

- **Summer Teaching Academy** (June 2007)
  Successfully completing all required course work and training
  South Dakota State University, Brookings, SD 57007

- **Schreyer Institute for Teaching Excellence** (May 2003)
  Successfully completing The Penn State course in college teaching
  The Pennsylvania State University, University Park, PA 16802
- **The** 1^{st} **Degree of Information Technology** (Aug 1995)
  National Technical Qualification Certificate, Korea

References

- Prof. Chita R. Das (das@cse.psu.edu), Academic Advisor; Head of Department of Computer Science and Engineering; Distinguished Professor; and formal NSF Director and current Department Head
  Tel: (814) 865 – 0194
  School of Electrical Engineering and Computer Science
  The Pennsylvania State University, University Park, PA 16802
- Prof. Tom La Porta (tlp@cse.psu.edu), Director of School of Electrical Engineering and Computer Science; Evan Pugh Professor; and William E. Leonhard Professor
  Tel: (814) 865 – 6725
  School of Electrical Engineering and Computer Science
  The Pennsylvania State University, University Park, PA 16802
- Associate Prof. Yi Liu (yliu11@umassd.edu)
  Tel: (508) 910 – 6692
  Dept. of Computer and Information Science
  University of Massachusetts, Dartmouth, MA 02747