Letter of Interest

Dear Search Committee,

I'd like to apply for the position of Associate Dean for Research of the College of Engineering at the Wichita State University. I currently serve as Director and Professor of the School of Computing at the Southern Illinois University Carbondale (SIUC), IL. Prior to my current role, I served as a rotating Program Director at the National Science Foundation (NSF) by way of an IPA (Intergovernmental Personnel Act) assignment, while on the Computer Science and Engineering faculty of the University of Connecticut (UConn), Storrs, CT and briefly on the Computer Science Faculty of the American University (AU) in Washington, D.C. I was also the Graduate Program Director while with AU. Some of my qualifications are summarized in this letter for your perusal, which I believe have prepared me to excel in this position.

As founding Director of the School of Computing, I oversaw the merger of the former Department of Computer Science and the Department of Information Technology. The new School of Computing offers PhD, MS (both on-campus and on-line), BS, BA and Minor programs in Computer Science; BS (both on-campus and on-line) and Minor programs in Information Technology; an interdisciplinary MS program in Cybersecurity and Cyber Systems, as well as a graduate certificate (on-line) in Cybersecurity.

I led the efforts preparing for the re-accreditation by the Computing Accreditation Commission (CAC) of ABET of the BS program in CS. The ABET review was successfully completed on Nov 8 and 9, 2021 with no concerns, weaknesses or deficiencies. I also led the efforts preparing for the Program Reviews conducted every eight years by the Illinois Board of Higher Education in November, 2019 for the PhD, MS and BA programs in CS. The review reports all indicated good standings. In addition, I am coordinating the efforts by both CS and IT faculties to pursue the ABET accreditation of Cybersecurity and Information Technology at the baccalaureate level. I worked with the Dean and completed an articulation agreement in Fall 2019 with universities in India for qualified undergrad students to come to SIU in their junior year to complete a dual degree awarded by SIU and their universities in India. As School Director, I proposed an online offering of the existing on-campus Master of Science (MS) programs in *Computer Science* and the *Cybersecurity and Cyber Systems*. Both proposals were approved in the Spring of 2021. To retain our top undergraduate students, I proposed a (3+2)-year accelerated MS program in Computer Science, which officially started in Fall 2021. I also coordinate the efforts reaching out to high-school science teachers and counselors in Illinois, especially the southern Illinois region, and to organize webinars for students interested in Computer Science to meet faculty, current undergraduate students and alumni to encourage their applications and matriculation. The School of Computing is the only unit within the College that has continuous enrollment growth in 2021 (14%), 2022 (4%) and 2023 (24%).

I regularly host seminars on grantsmanship and diversifying funding sources for junior faculty. The proposal submissions have increased by 120% in the past five semesters and $1.5 million funding has been awarded to Assistant Professors, including three NSF awards, two USDA awards and one US DHS award.

At NSF, I was associated with the Division of Graduate Education (DGE) within the Directorate of Education and Human Resources (renamed as STEM Education in 2022). I oversaw the *CyberCorps: Scholarships for Service (SFS) Program* ($20 million annual budget committed by DGE) and the *Secure and Trustworthy Cyberspace (SaTC) Program* ($6 million annual budget committed by DGE). As Program Director, I was responsible for interaction with research communities, educational organizations, industry, and other federal agencies for inter-agency collaborations. I worked with all constituencies to ensure the

scientific rigor in the merit review process, the diversity of panel logistics, and the balance of the program portfolio. In conjunction with my SFS program responsibility, I also worked with partnering agencies in coordinating with 100+ agencies for an annual Cybersecurity Job Fair. The 2019 event took place in Jan. 7-9 during the partial government shutdown. As NSF employees were all furloughed, I oversaw this year's event as the only attending (exempted) NSF official, where 80+ unaffected agencies and 800+ participants attended. I also arranged and hosted three congressional visits to the Job Fair on behalf of NSF, including Rep. Pete Aguilar (D-CA-31), Sen. Tim Kaine (D-VA) and Rep. James Langevin (D-RI-2).

In addition to my divisional program responsibilities, I was designated as the Directorate representative Program Director on a cross-disciplinary team of NSF Program Directors, managing foundation-wide programs in response to the NSF "*Big Ideas*". In particular, I participated in the initiation of the pioneering *Quantum Leap Challenge Institutes* (QLCI) program, and the *Enabling Quantum Leap: Quantum Idea Incubator for Transformational Advances in Quantum Systems* (QII-TAQS). In recognition of my contributions to these two pioneering programs, I received the 2019 NSF Director's Award, the most prestigious NSF award given to a program director.

My research work in the areas of *Extreme-Scale Computing and Data Analytics*, *Computational Biology*, as well as *Secure and Applied Algorithms* has resulted in more than 100 scientific articles, including more than 40 top-tier journal papers; funding by the National Science Foundation, National Institutes of Health, and US Department of Education amounting to more than $2.3M as PI, and $2.7M as Co-PI; ten PhD and twelve MS graduates for whom I served as the major advisor. Among the grants I received are a GAANN (Graduate Assistance in Areas of National Need) grant, 2013-2018, entitled *Exascale Computing in Science and Engineering*, as well as the NSF REU (Research Experience for Undergraduates) Site awards, entitled *Bio-Grid Initiatives for Interdisciplinary Research and Education* at UConn in 2008-2014. I worked closely with the National Center for Women & Information Technology to proactively recruit women interested in information technology. In addition, we made substantial efforts in recruiting URM REU fellows. I worked with faculty mentors from five departments and oversaw the doctoral student recruitment, GAANN fellow selection, curriculum development, program design, and research mentoring, etc.

I initiated in 2004 the UConn *Bio-Grid Initiatives* to establish a campus-wide Computational, Data and Knowledge Grid for computation- and/or data-intensive life-science research and education for use across the UConn campus. As an associated outreach activity, I organized the *International Bio-Grid Workshop* to promote and reinforce awareness of advantages linked to the use of modern information technology in life-science research and practice. From 2003-2009, the Bio-Grid events were held world wide in such cities as Tokyo, Chicago, Cardiff (UK), Singapore, Rio de Janeiro, and Berlin (Germany), *etc*. I taught extensively in Computer Science. 73% (35 out of 48) of the courses I taught at UConn received a student evaluation score $\geq$ the departmental mean. In addition to classroom teaching, I regularly mentored undergraduate honor projects for students who took my courses for honor credits. I also regularly serve on federal funding review panels, journal editorial boards and technical and steering committees for major conferences.

I very much look forward to an opportunity to further discuss my qualifications. I can be reached by email at chuang@cs.siu.edu or by phone at [redacted]

Sincerely,

Chun-Hsi Huang, Ph.D.

September 1, 2024

CURRENT ADDRESS

[redacted]

EDUCATION

Ph.D. in Computer Science and Engineering, State University of New York at Buffalo, 1996-2001
Dissertation: *Communication-Efficient Bulk Synchronous Parallel Algorithms*
M.S. in Computer Science, University of Southern California, 1992-1994
B.S. in Computer and Information Science, National Chiao-Tung University, Hsinchu, Taiwan, 1985-1989

PROFESSIONAL APPOINTMENTS

08/2019 - present	Professor and Founding Director, School of Computing (formerly Departments of Computer Science, Information Technology) Southern Illinois University, Carbondale, IL 62901
08/2017 - 08/2019	Program Director, Division of Graduate Education National Science Foundation, Alexandria, VA 22314 ▷ *CyberCorps: Scholarship for Service (SFS) Program* ▷ *Secure and Trustworthy Cyberspace (SaTC) Program* ▷ *Quantum Leap Challenge Institutes (QLCI) Program* ▷ *Quantum Idea Incubator for Transformational Advances in Quantum Systems (QII-TAQS)* ▷ *Training-based Workforce Development for Advanced Cyberinfrastructure (CyberTraining)*
08/2018 - 08/2019	Professor and Graduate Program Director, Department of Computer Science American University, Washington DC 20016
08/2007 - 08/2018	Associate Professor with tenure, Department of Computer Science and Engineering University of Connecticut, Storrs, CT 06269
08/2001 - 08/2007	Assistant Professor, Department of Computer Science and Engineering University of Connecticut, Storrs, CT 06269
08/1996 - 06/2001	Lecturer (98-00), Teaching Assistant (96-00), Research Assistant (00-01) Department of Computer Science and Engineering State University of New York at Buffalo, Buffalo, NY 14260
08/1994 - 08/1996	Software Engineer, Multimedia Business Division, Acer, Inc. Taipei, Taiwan

ADMINISTRATIVE ACCOMPLISHMENTS

As Director of School of Computing at Southern Illinois University Carbondale (2019-current)

▷ I regularly mentored our junior faculty individually on grantsmanship and diversifying funding sources. The proposal submissions have increased by 120% in the past five semesters and $1.5 million funding has been awarded in these five semesters to Assistant Professors, including three NSF research awards, two USDA awards and one US DHS award. This is especially important as the School added six additional tenure-track faculty since 2023, and will recruit four more tenure-track faculty to start in 2025. Besides grantsmanship and mock reviews, I mentor faculty on research ethics such as RCR, DEI and COI, etc.

▷ To incentivize faculty scholarly work, I work with the Dean and the Vice Chancellor for Research on seed funding to help faculty prepare for large proposals, offering course release, teaching and research awards, as well as merit pay raises, whenever possible, to faculty who continue to actively pursue and succeed in external funding. I also assist faculty's complex research projects in interdisciplinary team organization, securing institutional infrastructure support, and outreach to industry partners and government agencies.

▷ As founding Director of the School of Computing, I worked with three Deans and oversaw the merger of the former Department of Computer Science (then in College of Science, with 15 Tenured/Tenure-Track faculty and 5 Non-Tenure-Track faculty) and the Department of Information Technology (then in College of Business, with 7 Tenured /Tenure-Track faculty, 2 Non-Tenure-Track faculty and 10 on-line faculty, primarily offering technology programs) since Fall 2019, part of the campus-wide reorganization initiatives. The School was later moved into the College of Engineering in Fall 2020. The new School of Computing offers PhD, MS, BS, BA and Minor programs in Computer Science; BS (both on-campus and on-line) and Minor programs in Information Technology; an interdisciplinary MS program in Cybersecurity and Cyber Systems (both on-campus and on-line), as well as a graduate certificate program (on-line) in Cybersecurity.

▷ As School Director, I led the efforts preparing for the re-accreditation by the Computing Accreditation Commission (CAC) of ABET of the BS program in CS. The ABET review was successfully completed on Nov 8 and 9, 2021 with no concerns, weaknesses or deficiencies.

▷ I led the efforts preparing for the Program Reviews conducted every eight years by the Illinois Board of Higher Education in November, 2019 for the PhD, MS and BA programs in CS. The review reports all indicated good standings. In addition, I am coordinating the efforts by both CS and IT faculties to pursue the ABET accreditation in Cybersecurity and Information Technology at the baccalaureate level.

▷ As part of the University's outreach and recruitment initiatives, I worked with the Science Dean and completed an articulation agreement in Fall 2019 with universities in India for qualified undergrad students to come to SIU in their junior year to complete a dual degree awarded by SIU and their universities in India. I am currently working with the Engineering Dean on an AI+ curriculum for students across the campus. Two courses on *Generative AI* have been designed and offered in Summer 2024 for Computing students and in Fall 2024 as an honor course for all majors across SIU campus.

▷ As School Director, I proposed an online offering of the existing on-campus Master of Science (MS) program in *Computer Science* and the *Cybersecurity and Cyber Systems*. Both proposals were approved in the

Spring of 2021. To retain our top undergraduate students, I proposed a (3+2)-year accelerated MS program in Computer Science, which officially started in Fall 2021. I also work with our advisement office on a retention plan to "*leave no student behind*", emphasizing proactive advising, early intervention, effective tutoring, and organizing support groups for students at risk of a D/W/F grade.

▷ I coordinate the efforts reaching out to high-school science teachers, counselors and community colleges in Illinois and organizing in-person or virtual visits for students interested in Computing to meet faculty, current students and alumni to encourage their applications. As a result of this and the above recruitment and retention efforts, Computer Science programs witnessed a 14%, 4%, 24% and 8% enrollment growth in 2021-2024, respectively. Among the 120+ majors offered at SIU, Computer Science is one of the only three programs, along with Medical Education and Aviation Flight, that have an enrollment growth in the four consecutive years of 2021-2024.

As Program Director of National Science Foundation (2017-2019)

▷ At NSF, I was associated with the Division of Graduate Education (DGE) within the Directorate of Education and Human Resources (now Directorate of STEM Education). My primary program responsibilities included the *CyberCorps: Scholarships for Service (SFS) Program* ($20 million annual budget committed by DGE, managed by two program officers) and the *Secure and Trustworthy Cyberspace (SaTC) Program* ($6 million annual budget committed by DGE).

▷ In conjunction with my NSF program responsibility, *i.e.* the *CyberCorps: Scholarship for Service* (SFS) Program, I worked with partnering agencies in coordinating with 100+ government agencies for an annual Cybersecurity Job Fair. The 2019 event took place in Jan. 7-9 during the partial government shutdown. As NSF employees were all furloughed, I oversaw this year's event as the only attending (exempted) NSF official, where 80+ unaffected agencies and 800+ participants attended. I also arranged and hosted three congressional visits to the Job Fair on behalf of NSF, including Rep. Pete Aguilar (D-CA-31), Sen. Tim Kaine (D-VA) and Rep. James Langevin (D-RI-2).

▷ I was designated as the Program Director representing the Directorate of Education and Human Resources on a cross-disciplinary team of NSF Program Directors, managing foundation-wide programs in response to the NSF "*Big Ideas*", ten bold, long-term research and process ideas that identify areas for future investment at the frontiers of science and engineering. Specifically, I participated in the initiation of the pioneering *Quantum Leap Challenge Institutes* (QLCI) program, and the *Enabling Quantum Leap: Quantum Idea Incubator for Transformational Advances in Quantum Systems* (QII-TAQS). Both programs are consistent with the scope of NSF multidisciplinary centers for quantum research and education as described in the National Quantum Initiative Act, H.R. 6227, December 21, 2018.

▷ I was designated as the Program Director representing the Division of Graduate Education on the cross-directorate program of *Training-based Workforce Development for Advanced Cyberinfrastructure* administered by the Division of Advanced Cyber-Infrastructure (ACI) of the Directorate of Computer and Information Science and Engineering (CISE). I was responsible for extensive interaction with research communities, formal and informal educational organizations, industry, and other federal agencies for inter-agency collaborations. I worked with all constituencies to ensure the scientific rigor in the merit review process, the

diversity of panel logistics, as well as the balance of the program portfolio.

▷ I received the 2019 NSF Director's Award, the most prestigious award given to a permanent or rotating Program Director, "*For superior accomplishment and outstanding leadership in one of NSF's 10 Big Ideas, the Quantum Leap, resulting in next generation sensing, modeling and computing of particles and energy at atomic and subatomic scales, and supporting the National Quantum Initiative, accelerating the development of quantum information science and technology applications across a number of US S&T agencies.*"

AWARDS and HONORS

Recipient of the 2019 NSF Director's Award

SCHOLARLY PUBLICATIONS

Journals - Full Articles

1. S Rimal, M Agrahari and C-H Huang, *"Towards Unbiased Machine Learning: Principles and Practice"*, ACM Computing Surveys, under review, 2024.

2. N Tran, S Lee and C-H Huang, *"An Efficient Unbiased Learning Approach to Modeling Transcription Factor Binding Sites"*, PLOS Computational Biology, under revision, 2024.

3. B Almarri, S Rajasekaran and C-H Huang, *"Automatic Subject-specific Spatiotemporal Feature Selection for Subject-independent Affective BCI"*, PLOS ONE, 16(8):e0253383, 2021, 18 pages. (PMID: 34437542) doi: 10.1371/journal.pone.0253383.

4. Fei Dou, Jin Lu, Tingyang Xu, C Huang and Jinbo Bi, *"A Bisection Reinforcement Learning Approach to 3D Indoor Localization"*, IEEE Internet of Things Journal, Vol 8, No 8, 2021, pp. 6519-6535.

5. Sultan Al Yami and Chun-Hsi Huang, *"Non-greedy Unbalanced Huffman Tree Compressor for Single and Multi-fasta Files"*, Journal of Computational Biology, Vol 27, No 6, 2020, pp. 868-876.
   ▷ Software available at **https://github.uconn.edu/sya12005/** (PMID: 31553226)

6. Sultan Al Yami and Chun-Hsi Huang, *"LFastqC: A Lossless Non-Reference-Based FASTQ Compressor"*, PLOS ONE, 14(11):e0224806, 2019, 10 pages. (PMID: 31725736)
   ▷ Software available at **https://github.uconn.edu/sya12005/LFastqC/**

7. Ngoc Tam L. Tran and Chun-Hsi Huang, *"Performance Evaluation for MOTIFSIM"*, Biological Procedures Online, 20:23, 2018, 10 pages. (PMID: 30574025)

8. Ngoc Tam L. Tran and Chun-Hsi Huang, *"MODSIDE: a MOtif Discovery pipeline and SImilarity DEtector"*, BMC Genomics, 19:755, 2018, 9 pages. (PMID: 30340511)
   ▷ Webtool available at **http://modside.org/**

9. NT Tran and C-H Huang, *"MOTIFSIM 2.1: An Enhanced Software Platform for Detecting Similarity in Multiple DNA Motif Datasets"*, Journal of Computational Biology, 24(9):895-905, 2017.
   ▷ Webtool available at **http://motifsim.org/** (PMID: 28632401)

10. Chun-Hsi Huang, *"REU Site: Bio-Grid Initiatives for Interdisciplinary Research and Education"*, Journal of Parallel and Distributed Computing, Vol 105, July 2017, pp. 174-182.
    ▷ Website available at **http://biogrid.engr.uconn.edu/**

11. NT Tran and C-H Huang, *"Cloud-based MOTIFSIM: Detecting Similarity in Large DNA Motif Datasets"*, Journal of Computational Biology, Vol 24, No 5, 2017, pp. 450-459. (PMID: 27606547)
    ▷ Webtool available at **http://cloudbasedmotifsim.org/**

12. A Al-Okaily, B Almarri, S Al Yami and C-H Huang, *"Toward a Better Compression for DNA Sequences Using Huffman Encoding"*, Journal of Computational Biology, Vol 24, No 4, 2017, pp. 280-288. (PMID: 27960065)
    ▷ Software available at **https://github.com/aalokaily/Unbalanced-Huffman-Tree/**

13. A Al-Okaily and C-H Huang, *"ET-Motif: Solving the Exact (l, d)-Planted Motif Problem Using Error Tree Structure"*, Journal of Computational Biology, 2016:23(7), pp. 615-623. (PMID: 27152692)

14. Ngoc Tam Tran and Chun-Hsi Huang, *"MOTIFSIM: A Web Tool for Detecting Similarity in Multiple DNA Motif Datasets"*, BioTechniques, Vol 59, No 1, 2015, pp. 26-33.
    ▷ Webtool available at **http://motifsim.org/** (PMID: 26156781)

15. NT Tran, L DeLuccia, A McDonald and C-H Huang, *"Cross-Disciplinary Detection and Analysis of Network Motifs"*, Bioinformatics and Biology Insights, 2015:9, pp. 49-60. (PMID: 25983553)

16. NT Tran, S Mohan, Z Xu and CH Huang, *"Current Innovations and Future Challenges of Network Motif Detection"*, Briefings in Bioinformatics, Vol 16, No 3, 2015, pp. 497-525. (PMID: 24966356)

17. Chih Lee and Chun-Hsi Huang, *"LASAGNA-Search 2.0: Integrated Transcription Factor Binding Site Search and Visualization in a Browser"*, Bioinformatics, Vol 30, No 13, 2014, pp. 1923-1925.
    ▷ Webtool available at **http://biogrid-lasagna.engr.uconn.edu/lasagna_search/** (PMID: 24578403)

18. Ngoc Tam Tran and Chun-Hsi Huang, *"A Survey of Motif Finding Webtools for Detecting Binding Site Motifs in ChIP-Seq Data"*, Biology Direct, 9:4 (22 pages), 2014. (PMID: 24555784)

19. Ngoc Tam Tran and Chun-Hsi Huang, *"Gene Expression and Gene Ontology Enrichment Analysis for H3K4me3 and H3K4me1 in Mouse Liver and Mouse Embryonic Stem Cell using ChIP-Seq and RNA-Seq"*, Gene Regulation and Systems Biology, 2014:8, pp. 33-43. (PMID: 24526835)

20. Chih Lee and Chun-Hsi Huang, *"LASAGNA: A Novel Algorithm for Transcription Factor Binding Site Alignment"*, BMC Bioinformatics, Vol 14, 108 (13 pages), 2013. (PMID: 23522376)

21. C. Lee and C.-H. Huang, *"LASAGNA-Search: An Integrated Webtool for Transcription Factor Binding Site Search and Visualization"*, BioTechniques, Vol 54, No 3, 2013, pp. 141-153.
    ▷ Webtool available at **http://biogrid-lasagna.engr.uconn.edu/lasagna_search/** (PMID: 23477382)

22. Chih Lee and Chun-Hsi Huang, *"Searching for Transcription Factor Binding Sites in Vector Spaces"*, BMC Bioinformatics, Vol 13, 215 (12 pages), 2012.
    ▷ Software available at **http://biogrid.engr.uconn.edu/tfbs_search/** (PMID: 23244338)

23. S Quader and C Huang, *"Effect of Positional Dependence and Alignment Strategy on Modeling Transcription Factor Binding Sites"*, BMC Research Notes, 5:340 (11 pages), 2012. (PMID: 22748199)

24. E. Wong, B. Baur, S. Quader and C.-H. Huang, *"Biological Network Motif Detection: Principles and Practice"*, Briefings in Bioinformatics, Vol 13, No 2, 2012, pp. 202-215. (PMID: 22396487)

25. Chih Lee, Brittany Nkounkou and Chun-Hsi Huang, *"Comparison of LDA and SPRT on Clinical Dataset Classifications"*, Biomedical Informatics Insights, Vol 4, pp. 1-7, 2011. (PMID: 21949476)

26. C Wong, Y Li, C Lee and C Huang, *"Ensemble Learning Algorithms for Classification of mtDNA into Haplogroups"*, Briefings in Bioinformatics, Vol 12, No 1, 2011, pp. 1-9. (PMID: 20203074)

27. Chih Lee and Chun-Hsi Huang, *"Toward Optimizing the Cache Performance of Suffix Trees for Sequence Analysis Algorithms"*, Advances in Computational Biology, Springer, Series in Advances in Experimental Medicine and Biology (*AEMB*), 2010, Vol 680, Part 4, pp. 411-417. (PMID: 20865526)

28. C Lee, A Abdool and CH Huang, *"PCA-based Population Structure Inference with Generic Clustering Algorithms"*, BMC Bioinformatics, Vol 10, Suppl 1, S73 (13 pages), 2009. (PMID: 19208178)

29. CH Huang, A Konagaya, V Lanza and P Sloot, *"Biomedical Computations on the Grid"*, IEEE Tran on Information Technology in Biomedicine, Vol 12, No 2, 2008, pp. 133-137. (PMID: 18416025)

30. Longde Yin, Chun-Hsi Huang and Jun Ni, *"Clustering of Gene Expression Data: Performance and Similarity Analysis"*, BMC Bioinformatics, Vol 7, Suppl 4, S19 (11 pages), 2006. (PMID: 17217511)

31. Vincenzo Lanza and Chun-Hsi Huang, *"Advanced Course for Doctors as Departmental IT Network Administrators in Anesthesia and Intensive Care Units"*, Journal of Clinical Monitoring and Computing, Vol 20, No 5, 2006, pp. 333-339. (PMID: 16964536)

32. Chun-Hsi Huang, Sanguthevar Rajasekaran, Laurence T. Yang and Xin He, *"Finding Hamiltonian Paths in Tournaments on Clusters"*, Cluster Computing, Vol 9, No 3, 2006, pp. 345-353.

33. Chun-Hsi Huang, Xin He and Min Qian, *"Communication-Optimal Parallel Parenthesis Matching"*, Parallel Computing, Vol 32, No 1, 2006, pp. 14-23.

34. S Balla, V Thapar, S Verma, T Luong, T Faghri, C-H Huang, S Rajasekaran, JJ del Campo, J Shinn, W Mohler, M Maciejewski, M Gryk, B Piccirillo, S Schiller and M Schiller, *"Minimotif Miner: A Tool for Investigating Protein Function"*, Nature Methods, Vol 3, No 3, 2006, pp. 175-177. Short notes also appear as *"Matchmaker"* in *Netwatch* section, Science, Vol 311, 2006, p. 925; and as *"Minimotif Miner"* in *Toolbox* section, Journal of Proteome Research, Vol 15, Issue 4, 2006, pp. 736-737.
▷ Webtool available at **http://mnm.engr.uconn.edu/** (PMID: 16489333)

35. S. Rajasekaran, V. Thapar, H. Dave and C.-H. Huang, *"Randomized and Parallel Algorithms for Distance Matrix Calculations in Multiple Sequence Alignment"*, Journal of Clinical Monitoring and Computing, Vol 19, No 4-5, 2005, pp. 351-359. (PMID: 16328949)

36. S. Rajasekaran, S. Balla, C.-H. Huang, V. Thapar, M. Gryk, M. Maciejewski and M. Schiller, *"High-Performance Exact Algorithms for Motif Search"*, Journal of Clinical Monitoring and Computing, Vol 19, No 4-5, 2005, pp. 319-328. (PMID: 16328946)

37. C.-H. Huang, V. Lanza, S. Rajasekaran and W. Dubitzky, *"HealthGrid - Bridging Life Science and Information Technology"*, Journal of Clinical Monitoring and Computing, Vol 19, No 4-5, 2005, pp. 259-262. (PMID: 16328941)

38. S. Rajasekaran, S. Balla and C.-H. Huang, *"Exact Algorithms for Planted Motif Problems"*, Journal of Computational Biology, Vol 12, No 8, 2005, pp. 1115-1126. (PMID: 16241901)

39. Chain-Wu Lee and Chun-Hsi Huang, *"Toward Cooperative Genomic Knowledge Inference"*, Parallel Computing, Vol 30, No 9-10, 2004, pp. 1127-1135.

40. Chain-Wu Lee, Chun-Hsi Huang, Laurence T. Yang and Sanguthevar Rajasekaran, *"Distributed Path-Based Inference in Semantic Networks"*, Journal of Supercomputing, Vol 27, No 2, 2004, pp. 211-227.

41. C.-H. Huang and S. Rajasekaran, *"Parallel Pattern Identification in Biological Sequences on Clusters"*, IEEE Transactions on NanoBioscience, Vol 2, No 1, 2003, pp. 29-34. (PMID: 15382420)

42. Z-Z Chen, X He and C-H Huang,*"Finding Double Euler Trails of Planar Graphs in Linear Time"*, SIAM Journal on Computing, Vol 31, No 4, 2002, pp. 1255-1285. A preliminary version appeared in Proceedings of the 40-th IEEE Symposium on Foundations of Computer Science (*FOCS*), 319-329.

43. Xin He and Chun-Hsi Huang, *"Communication-Efficient BSP Algorithm for All Nearest Smaller Values Problem"*, Journal of Parallel and Distributed Computing, Vol 61, 2001, pp. 1425-1438.

Journals - Short Notes

1. Chun-Hsi Huang, *"Bioethics in a Health-Grid"*, Journal of Long-Term Effects of Medical Implants, Vol 18, Issue 1, 2009, p.37.

2. Chun-Hsi Huang and Vincenzo Lanza, *"HealthGrid: Towards Collaborative and On-Demand Healthcare"*, Journal of Clinical Monitoring and Computing, Vol 22, No 3, 2008, pp. 226-228.

3. Chun-Hsi Huang and Sanguthevar Rajasekaran, *"High-Performance Parallel Bio-computing"*, Parallel Computing, Vol 30, No 9-10, 2004, pp. 999-1000.

Conference Proceedings

1. Haitham Ghalwash and Chun-Hsi Huang, *"A Congestion Control Mechanism for SDN-Based Fat-Tree Networks"*, to appear in Proc. of 24-th IEEE High Performance Extreme Computing Conference (*HPEC*), Sep. 22-24, 2020, Waltham, MA.

2. Badar Almarri, Sanguthevar Rajasekaran and Chun-Hsi Huang *"Unsupervised Similarity-based Sensor Selection of Time Series"*, in Proc. of 10-th IEEE Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (*IEEE UEMCON*), 395-400, Oct. 10-12, 2019, Columbia University, New York City.

3. Badar Almarri and Chun-Hsi Huang, *"Neuroimaging Subjective Labeling Dichotomization and Class Imbalance Alleviation"*, in Proc. of the 9-th International IEEE EMBS Conference on Neural Engineering (NER'19), 1225-1229, Mar. 20-23, 2019, San Francisco, CA.

4. Haitham Ghalwash and Chun-Hsi Huang, *"QoS for SDN-Based Fat-tree Networks"*, in Proc. of 2019 Future of Information and Communications Conference (*FICC*), Lecture Notes in Networks and Systems, Springer, Vol 70, 691-705, Mar. 14-15, 2019, San Francisco, CA.

5. Badar Almarri and Chun-Hsi Huang, *"Simultaneous EEG Analysis and Feature Extraction Selection Based on Unsupervised Learning"*, in Proc. of the 11-th International Conference on Brain Informatics (*BI*), 260-269, Dec. 7-9, 2018, Arlington, TX.

6. Haitham Ghalwash and Chun-Hsi Huang, *"A QoS framework for SDN-based Networks"*, in Proc. of the 4-th IEEE International Conference on Collaboration and Internet Computing (*IEEE CIC*), 98-105, Oct 18-20, 2018. Philadelphia, PA.

7. Fei Dou, Jin Lu, Zigeng Wang, Xia Xiao, Jinbo Bi and Chun-Hsi Huang, *"Top-Down Indoor Localization with Wi-Fi Fingerprints using Deep Q-Network"*, in Proc. of 15-th IEEE Int'l Conf on Mobile Ad-hoc and Sensor Systems (*IEEE MASS*), 166-174, Oct. 9-12, 2018, Chengdu, China.

8. Abdulrahman Alshegaifi and Chun-Hsi Huang, *"A Locality-Aware, Energy-Efficient Cache Design for Large-Scale Multi-Core Systems"*, in Proc. of 14-th IEEE Int'l Conference on Green Computing and Communications (*GreenCom*) (6 pages), July 30 - Aug. 3, 2018, Halifax, Canada.

9. Haitham Ghalwash and Chun-Hsi Huang, *"Software-Defined Extreme-Scale Networks for Big-Data Applications"*, in Proc. of 21-st IEEE High Performance Extreme Computing Conference (*HPEC*), 1-7, Sep. 12-14, 2017, Waltham, MA.

10. Abdulrahman Alshegaifi and Chun-Hsi Huang, *"Towards an Energy-Efficient Cache Architecture for Extreme-Scale Systems"*, in Proc. of 21-st IEEE High Performance Extreme Computing Conference (*HPEC*), Sep. 12-14, 2017, Waltham, MA.

11. A Miyajan, C-H Huang and T Al-Somani, *"Speedup Higher-Order Masking of AES Using Normal Basis and SIMD"*, in Proceedings of the 11-th International Conference on Computer Engineering & Systems (*ICCES*), 293-298, Dec. 20-21, 2016, Cairo, Egypt.

12. H Ghalwash and C-H Huang, *"On SDN-Based Extreme-Scale Networks"*, in Proc. of 20-th IEEE High Performance Extreme Computing Conference (*HPEC*), 1-7, Sep. 13-15, 2016, Waltham, MA.

13. A Alshegaifi and C-H Huang, *"Impact of Stack Caches: Locality Awareness and Cost Effectiveness"*, presented in the 18-th Int'l Conf on Electrical and Computer Systems Engineering, Apr. 25-26, 2016, Boston, MA; published in Int'l Journal of Electrical, Computer, Energetic, Electronic and Communication Engineering, World Academy of Science, Engineering and Technology, 10:4, pp. 480-486.

14. A Miyajan, Z Shi, C-H Huang and T Al-Somani, *"An Efficient High-Order Masking of AES using SIMD"*, in Proceedings of the 10-th International Conference on Computer Engineering & Systems (*ICCES*), 363-368, Dec. 23-24, 2015, Cairo, Egypt.

15. A Miyajan, Z Shi, C-H Huang and T. Al-Somani, *"Accelerating Higher-Order Masking of AES Using Composite Field and SIMD"*, in Proc. of the 15-th IEEE International Symposium on Signal Processing and Information Technology (*ISSPIT)*, 575-580, Dec. 7-10, 2015, Abu Dhabi, UAE.

16. Chun-Hsi Huang, *"REU Site: Bio-Grid Initiatives for Interdisciplinary Research and Education"*, in Proc. of the 2015 Workshop on Education for High Performance Computing (*EduHPC*), in conjunction with the International Conference for High-Performance Computing, Networking, Storage and Analysis (*ACM SC15*), Sep. 16, 2015, Austin, TX. (doi: 10.1145/2831425.2831429)

17. N Tran and C Huang, *"Scalable Parallel Algorithms for Biological Motif Search"*, in Proc. of SIAM Conf. on Parallel Processing for Scientific Computing (*PP12*), Feb. 15-17, 2012, Savannah, Georgia.

18. Chih Lee and Chun-Hsi Huang, *"Geometric Visualization of Transcription Factor Binding Sites in Context"*, in Proc. of the 2-nd ACM Conference on Bioinformatics, Computational Biology and Biomedicine (*ACM BCB*), 457-461, Aug. 1-3, 2011, Chicago, IL.

19. Saad Quader, Nathan Snyder, Kevin Su, Ericka Mochan and Chun-Hsi Huang, *"ML-Consensus: A General Consensus Model for Variable-Length Transcription Factor Binding Sites"*, in Proc. of the 9-th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (*EvoBio*), Springer LNCS 6623, 25-36, Apr. 27-29, 2011, Torino, Italy.

20. Brittany Nkounkou, Colin Brown, Chih Lee and Chun-Hsi Huang, *"Biological Data Classifications with LDA and SPRT"*, in Proc. of the first IEEE International Workshop on Mining and Management of Biological and Health Data, in conjunction with the IEEE International Conference on Bioinformatics & Biomedicine, 164-168, Dec. 18-21, 2010, Hong Kong.

21. J Christopherson and C-H Huang, *"Optimized Data Migration within a Medical Grid"*, in Proc. of the 3-rd Int'l Conf on Health Informatics, 117-120, Jan. 20-23, 2010, Valencia, Spain.

22. C Luciano and C Huang, *"Structural Motif Enumeration in Transcriptional Regulation Networks"*, in Proc. of the first Int'l Conf on Bioinformatics, 131-136, Jan. 20-23, 2010, Valencia, Spain.

23. Chih Lee, Ali Abdool and Chun-Hsi Huang, *"PCA-based Population Structure Inference with Generic Clustering Algorithms"*, in Proceedings of the 7-th Asia Pacific Bioinformatics Conference (*APBC*), 761-771, Jan 13-16, 2009, Beijing, China.

24. V Lanza, M Ignazia Cascio and C Huang, *"Towards an e-Learning and Tele-medicine Network for Better Quality of Patient Care"*, in Proc of 4-th European Congress of the Int'l Federation for Medical and Biological Engineering (*MBEC*), Vol 22 (Part 8), 986-993, Nov. 23-27, 2008, Antwerp, Belgium.

25. Vincenzo Lanza, Maura Ignazia Cascio and Chun-Hsi Huang, *"Towards On-Demand Biomedical Knowledge Extraction"*, in Proc. of the 2008 International Conference on Health Informatics (*HealthInf*), 102-109, Jan. 28-31, 2008, Funchal, Madeira-Portugal.

26. Chun-Hsi Huang and Vincenzo Lanza, *"Health-Grid: Towards Collaborative and On-Demand Healthcare"*, in Proc. of the 2007 Annual Meeting of the Society for Computing and Technology in Anaesthesia (*SCATA*), 10-11, Nov. 21-23, 2007, the Royal College of Anaesthetists, London, UK.

27. Chun-Hsi Huang, *"Latency Reduction in Clinical and Translational Research"*, in Proc. of the 21-st International Symp. on Critical Care Medicine, 437-446, Nov. 10-13, 2006, Venice-Mestre, Italy.

28. Chun-Hsi Huang, *"Grid-Enabling the UMLS"*, in Proceedings of the 2006 American Medical Informatics Association Spring Congress, May 16-18, Phoenix, AZ. (CD-ROM)

29. Thomas Puzak and Chun-Hsi Huang, *"An Analysis of the Effects of Spatial Locality on the Cache Performance of Binary Search Trees"*, in Proceedings of the International Conference on Software and Data Technologies (*ICSoft*), Vol 2, 94-101, Sep. 11-14, 2006, Setubal, Portugal.

30. Longde Yin and Chun-Hsi Huang, *"Clustering of Gene Expression Data: Performance and Similarity Analysis"*, in Proceedings of the IEEE Symposium of Computations in Bioinformatics and Bioscience (*SCBB*), 142-149, June 22-26, 2006, Hangzhou, China.

31. Longde Yin and Chun-Hsi Huang, *"A Heuristic Approach to Scoring Gene Clustering Algorithms"*, in Proceedings of the International Conference on Bioinformatics and Computational Biology (*BioComp*), 135-141, June 26-29, 2006, Las Vegas, NV.

32. Chun-Hsi Huang, *"BioGrid: A Collaborative Environment for Life Science Research"*, in Proc. of the 20-th Int'l Symp. on Critical Care Medicine, 123-132, Nov. 18-21, 2005, Trieste, Italy. (invited)

33. Chun-Hsi Huang and Sanguthevar Rajasekaran, *"BioGrid - Bridging Life Science and Information Technology"*, in Proceedings of the 5-th IEEE/ACM International Symposium on Cluster Computing and the Grid (*IEEE/ACM CCGrid*)(*BioGrid Workshop*), 450-454, May 9-12, 2005, Cardiff, UK.

34. S. Rajasekaran, S. Balla, C.-H. Huang, V. Thapar, M. Gryk, M. Maciejewski and M. Schiller, *"Exact Algorithms for Motif Search"*, in Proceedings of the 3-rd Asia-Pacific Bioinformatics Conference (*APBC*), 239-248, Jan. 17-21, 2005, Singapore.

35. S Rajasekaran, S Balla and C-H Huang, *"Exact Algorithms for Planted Motif Challenge Problems"*, in Proc. of the 3-rd Asia-Pacific Bioinformatics Conf (*APBC*), 249-259, Jan. 17-31, 2005, Singapore.

36. S Rajasekaran, V Thapar, H Dave and C-H Huang, *"A Randomized Algorithm for Distance Matrix Calculations in Multiple Sequence Alignment"*, in Proc. of the First Conference on Knowledge Exploration in Life Science Informatics (*KELSI*), LNAI 3303:33-45, Nov. 25-26, 2004, Milano, Italy.

37. Chun-Hsi Huang and Sanguthevar Rajasekaran, *"Biomedical Computations on the Grid"*, in Proceedings of the 4-th IEEE/ACM International Symposium on Cluster Computing and the Grid (*IEEE/ACM CCGrid*) (*BioGrid Workshop*), Apr. 19-22, 2004, Chicago, IL. (CD-ROM)

38. C-W Lee, C-H Huang, S Rajasekaran, L T Yang and D F Hsu, *"Distributed Path-Based Inference in Semantic Networks"*, in Proc of the 7-th IEEE Int'l Symposium on Parallel Architectures, Algorithms, and Networks (*I-SPAN*), 232-237, May 10-12, 2004, Hong Kong, China.

39. Chain-Wu Lee, Chun-Hsi Huang and Sanguthevar Rajasekaran, *"TROJAN: A Scalable Distributed Semantic Network System"*, in Proceedings of 15-th IEEE International Conference on Tools with Artificial Intelligence (*ICTAI*), 219-223, Nov. 3-5, 2003, Sacramento, CA.

40. Chun-Hsi Huang and Xin He, *"Average-Case Communication-Optimal Parallel Parenthesis Matching"*, in Proceedings of the 13-th International Symposium on Algorithms and Computation (*ISAAC*), LNCS 2518:308-319, Springer-Verlag, Nov. 20-23, 2002, Vancouver, Canada.

41. C-H Huang, *"Parallel Pattern Identification in Biological Sequences on Clusters"*, in Proc of the 4-th IEEE Int'l Conf on Cluster Computing (*IEEE Cluster*), 127-134, Sep. 24-26, 2002, Chicago, IL.

42. C-H Huang, *"Grid-Enabled Parallel Divide-And-Conquer - Theory and Practice"*, in Proc. of 17-th ACM SIGAPP Symp. on Applied Computing (*SAC*), 865-869, Mar. 10-14, 2002, Madrid, Spain.

43. Chun-Hsi Huang and Xin He, *"Parallel Range Searching in Large Databases Based on General Parallel Prefix Computation"*, in Proceedings of the 10-th SIAM Conference on Parallel Processing for Scientific Computing, Mar. 12-14, 2001, Portsmouth, VA. (CD-ROM)

44. Chun-Hsi Huang and Xin He, *"Communication-Efficient Bulk Synchronous Parallel Algorithm for Parentheses Matching"*, in Proceedings of the 10-th SIAM Conference on Parallel Processing for Scientific Computing, Mar. 12-14, 2001, Portsmouth, VA. (CD-ROM)

45. Chun-Hsi Huang and Xin He, *"Finding Hamiltonian Paths in Tournaments on Clusters – A Provably Communication-Efficient Approach"*, in Proceedings of the 16-th ACM SIGAPP Symposium on Applied Computing (*SAC*), 549-553, Mar. 11-14, 2001, Las Vegas, NV.

46. Xin He and Chun-Hsi Huang, *"Scalable Coarse Grained Parallel Interval Graph Algorithms"*, in Proceedings of the International Conference on Parallel and Distributed Processing Techniques and Applications (*PDPTA*), 1369-1376, June 26-29, 2000, Las Vegas, NV.

47. C-H Huang and X He, *"Communication-Efficient Coarse-Grained Parallel Algorithm for All Nearest Smaller Values Problem and its Applications"*, in Proc. of the Int'l Conf on Parallel and Distributed Processing Techniques and Applications (*PDPTA*), 1377-1384, June 26-29, 2000, Las Vegas, NV.

48. Zhi-Zhong Chen, Xin He and Chun-Hsi Huang,*"Finding Double Euler Trails of Planar Graphs in Linear Time"*, in Proceedings of the 40-th IEEE Symposium on Foundations of Computer Science (*FOCS*), 319-329, Oct. 17-19, 1999, New York City.

Conference Proceedings - Abstract Refereed and Published

1. Bardiya Vaziri and C.-H. Huang, *"Semantic Integration in Biomedical Networks"*, ISCB Conference on Semantics in Healthcare and Life Sciences (*C-SHALS*), Feb. 25-27, 2009, Boston, MA.

2. C Bergenhem, C Lee and C Huang, *"On the Cache-Awareness in DNA Probe Selection"*, in Proc of the 2008 Rocky Mountain Bioinformatics Conf, 16-17, Dec. 4-7, 2008, Aspen/Snowmass, CO.

3. Vincenzo Lanza and Chun-Hsi Huang, *"Cyber-infrastructure for Biomedical Computing and Learning"*, in Proceedings of the 15-th International Conference on Intelligent Systems for Molecular Biology (*ISMB*), July 21-25, 2007, Vienna, Austria.

4. Min Qian and Chun-Hsi Huang, *"Parallel Algorithms for Finding Short Approximate non-Tandem Repeats"*, in Proceedings of the 13-th International Conference on Intelligent Systems for Molecular Biology (*ISMB*), June 25-29, 2005, Detroit, MI.

5. Chun-Hsi Huang, *"Toward A Distributed UMLS"*, in Proceedings of the 2-nd Biological Language Conference (*BLC*), 77-78, Nov. 18-19, 2004, Carnegie Mellon University, Pittsburgh, PA.

6. Chun-Hsi Huang, Sanguthevar Rajasekaran and Longde Yin, *"Distributed Clinical Knowledge Inferencing"*, in Poster Book of the 8-th International Conference on Research in Computational Molecular Biology (*RECOMB*), 556-557, Mar. 27-31, 2004, San Diego, CA.

7. Longde Yin, Chun-Hsi Huang and Sanguthevar Rajasekaran, *"Parallel Data Mining of Bayesian Networks from Gene Expression Data"*, in Poster Book of the 8-th Int'l Conference on Research in Computational Molecular Biology (*RECOMB*), 122-123, Mar. 27-31, 2004, San Diego, CA.

Technical Reports

1. Chih Lee and Chun-Hsi Huang, *"Negative Example Aided Transcription Factor Binding Site Search"*, Arxiv preprint arXiv:1104.1234v1 [q-bio.GN], 2011.

2. Chun-Hsi Huang, *"CRI: Computing Infrastructure for the UConn Health-Grid Initiatives"*, in Proceedings of the 2006 NSF CISE CRI-PI's Workshop, 172-176, June 23-25, 2006, Snowbird, Utah.

3. Chun-Hsi Huang, *"Communication-Efficient Bulk Synchronous Parallel Algorithms"*, Ph.D. Dissertation, Department of Computer Science and Engineering, SUNY-Buffalo, Technical Report 2001-06.

RESEARCH SUPPORT

1. **Project Title**: *Acquisition of a GPU Cluster for Interdisciplinary HPC Research and Education*
   Funding Source: Office of Vice Chancellor for Research, SIUC
   Amount & Period: $100,000 (Aug. 2020 - Aug. 2022)
   Role: Principal Investigator

2. **Project Title**: *Secure and Trustworthy Cyberspace IPA* (DGE-1855366)
   Funding Source: National Science Foundation (EHR/DGE), with 10% AU Cost Share
   Amount & Period: $280,876 (Sep. 5, 2018 - Sep. 4, 2019)
   Role: Principal Investigator

3. **Project Title**: *CyberCorps Scholarship for Service IPA* (DGE-1755374)
   Funding Source: National Science Foundation (EHR/DGE), with 10% UConn Cost Share
   Amount & Period: $212,565 (Sep. 5, 2017 - Sep. 4, 2018)
   Role: Principal Investigator

4. **Project Title**: *GAANN: Exascale Computing in Science and Engineering* (P200A130153)
   Funding Source: US Department of Education ($845,376); UConn SoE matching ($211,344)
   Amount & Period: $1,056,720 (Aug. 16, 2013 - Aug. 15, 2018)
   Role: Principal Investigator (co-PIs: S. Rajasekaran, M. Khan)

5. **Project Title**: *Bio-Grid Initiatives for Interdisciplinary Research and Education* (OCI-1156837)
   Funding Source: National Science Foundation (OCI: REU Site, $200K); SoE matching ($41,124)
   Amount & Period: $241,124 (March 1, 2012 - Feb. 28, 2015)
   Role: Principal Investigator (co-PI: R. Ammar)

6. **Project Title**: *Graduate Assistantship in Areas of National Need Project on Cloud Computing*
   Funding Source: US Department of Education
   Amount & Period: $400,000 (Aug. 01, 2010 - July 31, 2013)
   Role: co-Principal Investigator (PI: S. Rajasekaran, other Investigators: R. Ammar, J. Cui and P. Luh)

7. **Project Title**: *Bio-Grid Initiatives for Interdisciplinary Research and Education* (CCF-0755373)
   Funding Source: National Science Foundation (CISE-CCF: REU Site)
   Amount & Period: $285,000 (March 1, 2008 - Feb. 28, 2012)
   Role: Principal Investigator

8. **Project Title**: *Building Motif Lexicons* (R01-GM079689-01A1)
   Funding Source: National Institutes of Health (NIGM/NLM)
   Amount & Period: $1,100,000 (May 01, 2007 - Apr. 30, 2011)
   Role: co-Principal Investigator (PI: M. Schiller (UCHC); other Investigators: S. Rajasekaran (UConn), M. Gryk (UCHC) and M. Maciejewski (UCHC))

9. **Project Title**: *Computing Infrastructure for the UConn Health-Grid Initiatives* (CNS-0551549)
   Funding Source: National Science Foundation (CISE-CNS: CRI)
   Amount & Period: $62,000 (March 1, 2006 - Feb. 28, 2008)
   Role: Principal Investigator

10. **Project Title**: *Workshop on Biomedical Computations on the Grid* (R13-LM008619)
Funding Source: National Institutes of Health (National Library of Medicine)
Amount & Period: $100,000 (Jan. 15, 2005 - Oct. 14, 2010)
Role: Principal Investigator (co-PI: S. Rajasekaran)

11. **Project Title**: *Information Extraction from Massive Data Sets* (ITR-0326155)
Funding Source: National Science Foundation (CISE-IIS: ITR-Medium)
Amount & Period: $1,200,000 (Aug. 31, 2003 - Aug. 30, 2008)
Role: co-Investigator (PI: S. Rajasekaran; co-PIs: S. Sahni (U. Florida), T. Cormen (Dartmouth) and P. Pardalos (U. Florida))

12. **Project Title**: *Graph Algorithms on Coarse Grained Parallel Computers*
Funding Source: UConn Research Foundation (Faculty Large Grant)
Amount & Period: $20,837 (June 2002 - Dec. 2004)
Role: Principal Investigator

13. **Project Title**: *Efficient Parallel Pattern Identification in Biological Sequences*
Funding Source: Deanery, UConn School of Engineering (IT Grant, GE Source)
Amount & Period: $8,629 (Jan. 2002 - May 2002)
Role: Principal Investigator

GRADUATE STUDENT SUPERVISION[1]

- PhD Major Advisor - Completed
  - Sameerah Talafha (PhD, 2022, SIUC, co-advised with B. Rekabdar)
    Dissertation: *Generative Models in Natural Language Processing and Computer Vision*
    (First Employment: Computer Vision Engineer, VecTech)
  - Badar Almarri (PhD, 2021)
    Dissertation: *A BCI Framework for Affection Recognition: Channel and Feature Selection, and Subjective Label Dichotomization*
    (First Employment: Assistant Professor, King Faisal University, Al-Ahsa, Saudi Arabia)
  - Sultan Al Yami (PhD, 2021)
    Dissertation: *Lossless Compression Tools for Genomics Data*
    (First Employment: Assistant Professor, Najran University, Najran, Saudi Arabia)
  - Haitham Ghalwash (PhD, 2020)
    Dissertation: *QoS in SDN-Based Large-Scale Networks*
    (First Employment: Assistant Professor in Residence, Dept. of CSE, UConn, Storrs, CT)
  - Abdulrahman Alshegaifi (PhD, 2020)
    Dissertation: *Energy-Efficient Cache Architecture Towards Extreme-Scale Computing Systems*
    (First Employment: Assistant Professor, Al-Baha University, Al Baha, Saudi Arabia)
  - Ngoc Tam Tran (PhD, 2019)
    Dissertation: *Software Tools for DNA Motif Similarity Comparison and Analysis*
    (First Employment: Postdoc Associate, Dept of Gene Therapy, UMass School of Medicine)

[1] Unless otherwise indicated, degrees were awarded from the Department of Computer Science and Engineering, University of Connecticut.

  - Anas Al-Okaily (PhD, 2016)
    Dissertation: *A Novel Tree Structure for Pattern Matching in Biological Sequences*
    (First Employment: Teaching Assistant Professor, Northeastern University, Boston, MA)
  - Abdulaziz Miyajan (PhD, 2016)
    Dissertation: *An Efficient Leakage Free Countermeasure of AES Against Side Channel Attacks*
    (First Employment: Assistant Professor, Umm Al-Qura University, Mecca, Saudi Arabia)
  - Chih Lee (PhD, 2014)
    Dissertation: *Machine Learning Approaches to Transcription Factor Binding Site Search and Visualization* (First Employment: Bioinformatics Scientist, Illumina, San Diego, CA)
  - Ahmed A. Mohamed (PhD, 2006, co-advised with S. Rajasekaran)
    Dissertation: *Efficient Techniques for Multi-Document Summarization Using Document Graphs*
    (First Employment: Assistant Professor, Aswan University, Aswan, Egypt)

- PhD Major Advisor - In Progress
  - Sai Sharath Japa (SIUC)
    Dissertation: *Application of Deep Learning in Natural Language Processing for Information Retrieval* (proposal defended Nov. 29, 2021, co-advised with B. Rekabdar)

- MS[2] Major Advisor - Completed
  - Suraj Rimal (Thesis track, 2021, SIUC)
    Thesis: *Population Structure Inference Using PCA and Clustering Algorithms*
  - Manoj Agrahari (Thesis track, 2021, SIUC)
    Thesis: *Better Selection of K-mers for Compression of DNA Sequences using Huffman Encoding*
  - Yao Li (Plan B, 2017)
  - Ramyaa Muthumani (Plan B, 2015)
  - Li Wei (Plan B, 2015)
  - Shweta Ware (Plan B, 2015)
  - Chih Lee (Plan B, 2013)
  - Saad Quader (Plan A, 2012)
    Thesis: *Effect of Positional Dependence in Recognizing Transcription Factor Binding Sites*
  - Kourosh Keikhanzadeh, D.D.S (Plan A, 2007)
    Division of Endodontology, Department of Oral Health and Diagnostic Sciences, School of Dental Medicine, University of Connecticut Health Center
    Thesis: *Development of a True Web-Based Electronic Patient Record for Endodontics*
  - Thomas Puzak (Plan A, 2006)
    Thesis: *The Effects of Spatial Locality on the Cache Performance of Binary Search Trees*
  - Wangang Xie (Plan B, 2006)
  - Min Qian (Plan B, 2004)

- PhD Thesis Committee - Completed

[2]The M.S. program in CSE (and at UConn, in general) has two options, Plan A (thesis) and Plan B (non-thesis).

- Sruthi Rachamalla (2023, *Advisor*: H. Hexmoor, SIUC)
  Ellie Lovellette (2021, *Advisor*: H. Hexmoor, SIUC)
  Tham Hoang (2018, *Advisor*: D. Shin)
  Subrata Saha (2017, *Advisor*: S. Rajasekaran)
  Manal Alharbi (2015, *Advisor*: S. Rajasekaran)
  Lina Pu (2015, *Advisor*: J. Cui)
  Mahmoud Maghraby (2015, *Advisors*: R. Ammar & S. Rajasekaran)
  Rania Kilany (2013, *Advisors*: R. Ammar & S. Rajasekaran)
  Samir Elsayed (2013, *Advisors*: R. Ammar & S. Rajasekaran)
  Sumit Narayan (2010, Electrical and Computer Engineering, *Advisor*: J. Chandy)
  Lance Miller (2008, *Advisors*: A. Russell & T. J. Peters)
  Vishal Thapar (2008, *Advisor*: S. Rajasekaran)
  Mingjun Song (2008, *Advisor*: S. Rajasekaran)
  Marwan Sleiman (2007, *Advisor*: L. Lipsky)
  Jaime Davilla (2007, *Advisor*: S. Rajasekaran)
  Sudha Balla (2007, *Advisor*: S. Rajasekaran)
  Passent El-Kafrawy (2006, *Advisor*: R. McCartney)
  Ahmed M. Mohamed (2004, *Advisor*: R. Ammar)

- MS Committee - Completed

  - Aakash Chaudhary (2022, *Advisor*: D. Che, SIUC)
    Sai Shanmukha Narumanchi (2020, *Advisor*: K. Sinha, SIUC)
    Jieyao Gao (2017, *Advisor*: J. Bi)
    Mohammed Ameen (2017, *Advisor*: R. Ammar)
    Guanming Wu (2017, *Advisor*: A. Russell)
    Abdulaziz Alshammari (2017, *Advisor*: R. Ammar)
    Raed Alotaibi (2016, *Advisor*: R. Ammar)
    Morad Behandish (2016, Mechanical Engineering, *Advisor*: H. Ilies)
    Kranti Pothapu (2015, *Advisor*: A. Shvartsman)
    Ying Hu (2015, *Advisor*: S. Rajasekaran)
    Gregory Reinhold (2015, *Advisor*: A. Shvartsman)
    Hussain Albarakati (2015, *Advisor*: R. Ammar)
    Sultan Al Yami (2015, *Advisor*: Y. Shin)
    Ruhua Jiang (2015, *Advisor*: Y. Wu)
    Manal Alharbi (2015, *Advisor*: R. Ammar)
    Priya Periaswamy (2014, *Advisor*: S. Rajasekaran)
    Maram Hakami (2014, *Advisor*: R. Ammar)
    Orko Momin (2013, Electrical and Computer Engineering, *Advisor*: J. Chandy)
    Cengiz Karakoyunlu (2013, Electrical and Computer Engineering, *Advisor*: J. Chandy)
    Bo Ho (2013, *Advisor*: Y. Wu)
    Anuradharthi Ramani (2009, Electrical and Computer Engineering, *Advisor*: J. Chandy)
    Tina Miriam John (2008, Electrical and Computer Engineering, *Advisor*: J. Chandy)
    Herak Sen (2008, *Advisor*: S. Demurjian)
    Mohamed Saleem (2008, *Advisor*: S. Demurjian)
    Ramandeep Kaur (2006, *Advisor*: S. Rajasekaran)

Snigdha Verma (2006, *Advisor*: S. Rajasekaran)
Hong Wang (2005, *Advisor*: A. Russell)
Narasimha Shashidhar (2005, *Advisor*: A. Russell)
Guanqun Zhang (2004, *Advisor*: S. Rajasekaran)
Steven Moore (2004, *Advisor*: R. Ammar)
Betsy Cherian (2004, *Advisor*: S. Rajasekaran)
Yutong Yin (2003, *Advisor*: L. Lipsky)
Xin Liu (2003, *Advisor*: I. Greenshields)
Ahmed M. Mohamed (2002, *Advisor*: R. Ammar)

PROFESSIONAL SERVICE

- Federal Funding Reviews
  - Panelist, NSF EHR-DGE, 2022
  - Panelist, NIH Study Section ZRG1 IMST-K(70)R Bridge2AI Center (U54), 2021
  - External Reviewer, NSF MPS-DMR, 2020
  - External Reviewer, NSF CISE-OAC, 2020
  - Panelist, NIH CSR Study Section ZRG1 IMST-K(14) (recurring)
    (March 2019, Nov. 2018, June 2018, March 2018, July 2017)
  - Panelist, NSF CISE-ACI, 2016
  - External Reviewer, NSF OISE, 2011
  - Panelist, NSF CISE-CCF, 2009
  - External Reviewer, NIH Study Section ZRG1 BST-M(58), 2009
  - Panelist, NSF OCI (Office of Cyber-infrastructure), 2007
  - Panelist, NIH-NIBIB Study Section ZEB1 OSR-A(J2), 2007
- Other Funding Reviews
  - External Reviewer, Israel Science Foundation (*ISF*), 2018
  - External Reviewer, National Science Center of Poland, 2015
    (Narodowe Centrum Nauki - NCN, http://www.ncn.gov.pl).
  - External Reviewer, Qatar National Research Fund (*QNRF*, http://www.qnrf.org)
    2011 National Priorities Research Program (NPRP)
  - External Reviewer, Human Frontier Science Program Organization (*HFSP*, http://www.hfsp.org)
    2008 Research Grant Competition
- Invited Speeches
  - Talk Title: *Biological Modeling, Simulation and Computing to the Exascale*
    2011 International Symp. on Grids and Clouds (*ISGC*) and the Open Grid Forum (*OGF 31*)
    Academia Sinica, Taipei, Taiwan, Mar. 21-25, 2011.

  - Talk Title: *Peta-Scale Computing in Network Biology*
    CBI (Chem-Bio Informatics) Session at the 2010 International Conference on Bioinformatics (*InCoB*), Waseda University, Tokyo, Japan, Sep. 28, 2010.
  - Talk Title: *High-Performance Computing in Network Biology*
    9-th Emerging Information and Technology Conference (*EITC 09*), Bioinformatics Track Massachusetts Institute of Technology, Aug. 6-7, 2009.
  - Talk Title: *Towards an e-Learning and Telemedicine Network for Better Quality of Patient Care*
    International Year of Science and Technology for Africa: *The Role of Telemedicine Against Diseases and in Health Promotion*, Int'l Institute of Tele-medicine, Rome, Italy, Nov. 30, 2007.
  - Talk Title: *Health-Grid: Towards Collaborative and On-Demand Healthcare*
    2007 Annual Meeting of the Society for Computing and Technology in Anaesthesia (*SCATA*), Royal College of Anaesthetists, London, UK, Nov. 21-23, 2007.
  - Talk Title: *Advances on Health-Grid*
    International Symposium on Critical Care Medicine, Venice-Mestre, Italy, Nov. 10-13, 2006.
  - Talk Title: *Health-Grid*
    20-th Annual APICE (Anesthesia, Pain, Intensive Care and Emergency Medicine) Seminar, School of Critical Care Medicine, University of Trieste, Trieste, Italy, Nov. 18-21, 2005.
  - Talk Title: *Grid-Enabled Approaches for Biomedical Applications*
    Yale University High Performance Computing Symposium, Apr. 29-30, 2004.

- Journal Editorial Service
  - Serving on Editorial Board
    * PLOS ONE, Public Library of Science, 2014-present.
    * Biomedical Informatics Insights, SAGE Publishing, 2007-present.
  - Serving as Associate Editor
    * IEEE Transactions on Information Technology in Biomedicine (*IEEE-TITB*), 2008-2010.
  - Serving as Guest Editor
    * IEEE Transactions on Information Technology in Biomedicine, 2007.
    * Journal of Clinical Monitoring and Computing, 2005.
    * Parallel Computing, 2004.

- Journal Reviewing
  - PLOS Computational Biology (2020, 2016)
  - Journal of Parallel and Distributed Computing
    (2018, 2015, 2011:2x, 2010, 2008, 2007:5x, 2005:3x, 2004:2x, 2003, 2002, 2001)
  - Journal of Computer and System Sciences (2018)
  - IEEE/ACM Transactions on Computational Biology and Bioinformatics (2017, 2015:2x, 2013)
  - Bioinformatics (2015, 2014:2x, 2013:2x)
  - BMC Bioinformatics (2015, 2009, 2008)
  - BioMed Research International (2015:2x)

  - Briefings in Bioinformatics (2015, 2012)
  - IEEE Journal of Biomedical and Health Informatics (2015)
  - IEEE Access (2015)
  - BMC Genetics (2014)
  - Molecular Biology of the Cell (2014)
  - Biomedical Informatics Insights (2014, 2013:3x)
  - Statistics in Medicine (2013)
  - Computational Biology and Chemistry (2013)
  - Algorithms for Molecular Biology (2012)
  - Future Generation Computer Systems (2011, 2009, 2008, 2007, 2005, 2004)
  - Future Internet (2010)
  - Cluster Computing (2009), *Special Issue on e-Science*
  - IEEE Transactions on Information Technology in Biomedicine (2008, 2006)
  - IEEE Transactions on Systems, Man, and Cybernetics (2007, 2002)
  - Theoretical Computer Science (2006)
  - Journal of Clinical Monitoring and Computing (2006)
  - Computing Letters (2006)
  - IEEE Transactions on Parallel and Distributed Systems (2005)
    Special Issue on High-Performance Computational Biology
  - IEEE Transactions on VLSI Systems (2005)
  - Parallel Computing (2005)
  - Applied Bioinformatics (2005)
  - Soft Computing Journal (2004), *Special Issue on Bioinformatics and Medical Informatics*
  - IEEE Distributed System (2003)
  - Journal of Graph Algorithms and Applications (2002)

- Book Proposal Reviewing
  - Manuscript on *"Data Structures and Algorithms in Java, Sixth Edition "*, invited by Wiley, 2013.
  - Manuscript on *"Data Mining in Grid Computing Environments: Lessons Learned from the DataMiningGrid Project"*, invited by John Wiley and Sons, 2006.
  - Manuscript on *"Statistical Analysis of High-Throughput Data from Genomics and Proteomics"*, invited by Springer, 2005.
  - Manuscript on *"Digital Logic Design: A Modern Approach"*, invited by Morgan Kaufmann Publishers (ELS), 2005.

PROFESSIONAL SERVICE - Conferences

- Serving as General Chair

  - **Workshop on Biomedical Computations on the Grid** (*BioGrid*), in conjunction with the IEEE Symposium on Cluster Computing and the Grid (*CCGrid*, 2003-2007).
    * (7-th), June 29, 2009 via AG, Storrs-Berlin; tutorial on Feb. 9-10, 2010, Sydney, Australia.
    * (6-th), June 2, 2008, Chicago, IL.
    * (5-th), May 17, 2007, Rio de Janeiro, Brazil.
    * (4-th), May 18, 2006, Singapore.
    * (3-rd), May 10, 2005, Cardiff, UK.
    * (2-nd), Apr. 21, 2004, Chicago, IL.
    * (1-st), May 14, 2003, Tokyo, Japan.

- Serving as Finance co-Chair
  - First **IEEE International Conference on Computational Advances in Bio and medical Sciences** (*ICCABS*), Feb. 3-5, 2011, Orlando, FL.

- Serving on Steering Committee
  - **International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies** (*ENERGY*)
    (10-th) Sep. 21-Oct. 01, 2020, Lisbon, Portugal; (9-th) June 2-6, 2019, Athens, Greece; (8-th) May 20-24, 2018, Nice, France; (7-th) May 21-25, 2017, Barcelona, Spain.
  - **International Conference on Informatics and Assistive Technologies for Health-Care, Medical Support and Wellbeing** (*HEALTHINFO*)
    (4-th) Nov. 24-28, 2019, Valencia, Spain; (3-rd) Oct. 14-18, 2018, Nice, France; (2-nd) Oct. 8-12, 2017, Athens, Greece.
  - **Int'l Conference on Advances in Circuits, Electronics and Micro-electronics** (*CENICS*)
    (12-th) Oct. 27-31, 2019, Nice, France; (11-th) Sep. 16-20, 2018, Venice, Italy; (10-th) Sep. 10-14, 2017, Rome, Italy.
  - **International Conference on Global Health Challenges** (*GLOBAL HEALTH*)
    (8-th) Sep. 22-26, 2019, Porto, Portugal; (7-th) Nov. 18-22, 2018, Athens, Greece; (6-th) Nov. 12-16, 2017, Barcelona, Spain.

- Serving as Invited Faculty Panelist
  - 2012 **Microsoft Research Faculty Summit**, July 15-17, 2012, Microsoft Conference Center, Redmond, WA.

- Serving on Program Committee
  - IEEE International Conference on Internet of Things (*IEEE iThings*)
    (17-th) Aug. 19-22, 2024, Copenhagen, Denmark; (15-th) Aug. 22-25, 2022, Espoo, Finland; (14-th) Dec. 06-08, 2021, Melbourne, Australia; (13-th) Nov. 02-06, 2020, Rhodes Island, Greece. (held virtually)
  - IEEE International Conference on Green Computing and Communications (*GreenCom*)
    (20-th) Aug. 19-22, 2024, Copenhagen, Denmark; (18-th) Aug. 22-25, 2022, Espoo, Finland; (17-th) Dec. 06-08, 2021, Melbourne, Australia; (16-th) Nov. 02-06, 2020, Rhodes Island, Greece; (15-th) July 14-17, 2019, Atlanta, GA; (14-th) July 30 - Aug. 3, 2018, Halifax, Canada; (13-th) June 21-23, 2017, Exeter, UK.

- IEEE International Conference on Communications (*ICC*): Green Communication Systems and Networks Symposium (*GCSN*)
  (5-th) June 9-13, 2024, Denver, CO; (5-th) May 28- June 1, 2023, Rome, Italy; (4-th) May 16-20, 2022, Seoul, South Korea; (3-rd) June 14-18, 2021, Montreal, Canada; (2-nd) June 7-11, 2020, Dublin, Ireland; (1-st) May 20-24, 2019, Shanghai, China.
- IEEE Global Communications Conference: Green Communication Systems and Networks Symposium (*IEEE Globecom GCSN*)
  (3-rd), Dec. 4-8, 2023, Kuala Lumpur, Malaysia; (2-nd), Dec. 4-8, 2022, Rio de Janeiro, Brazil; (1-st), Dec. 7-11, 2021, Madrid, Spain.
- International Conference on eHealth, Telemedicine, and Social Medicine (*eTELEMED*)
  (12-th) Mar. 22-26, 2020, Barcelona, Spain; (11-th) Feb. 24-28, 2019, Athens, Greece; (10-th) Mar. 25-29, 2018, Rome, Italy; (9-th) Mar. 19-23, 2017, Nice, France; (8-th) Apr. 24-28, 2016, Venice, Italy; (7-th) Feb. 22-27, 2015, Lisbon, Portugal.
- International Conference on Informatics and Assistive Technologies for Health-Care, Medical Support and Wellbeing (*HEALTHINFO*)
  (4-th) Nov. 24-28, 2019, Valencia, Spain; (3-rd) Oct. 14-18, 2018, Nice, France; (2-nd) Oct. 8-12, 2017, Athens, Greece; (1-st) Aug. 21-25, 2016, Rome, Italy.
- IEEE International Conference on Bioinformatics and Biomedicine (*BIBM*)
  (13-th) Nov. 18-21, 2019, San Diego, CA; (12-th) Dec. 3-6, 2018, Madrid, Spain; (11-th) Nov. 13-16, 2017, Kansas City, MO; (10-th) Dec. 15-18, 2016, Shenzhen, China; (9-th) Nov. 9-12, 2015, Washington, D.C.; (8-th) Nov. 2-5, 2014, Belfast, UK; (7-th) Dec. 18-21, 2013, Shanghai, China; (6-th) Oct. 4-7, 2012, Philadelphia, PA; (4-th) Dec. 19-22, 2010, Hong Kong; (3-rd) Nov. 1-4, 2009, Washington D.C.; (2-nd) Nov. 3-5, 2008, Philadelphia, PA; (1-st) Nov. 2-4, 2007, Silicon Valley, CA.
- Int'l Conference on Advances in Circuits, Electronics and Micro-electronics (*CENICS*)
  (12-th) Oct. 27-31, 2019, Nice, France; (11-th) Sep. 16-20, 2018, Venice, Italy; (10-th) Sep. 10-14, 2017, Rome, Italy; (9-th) July 24-28, 2016, Nice, France; (8-th) Aug. 23-28, 2015, Venice, Italy; (7-th) Nov. 16-20, 2014, Lisbon, Portugal; (6-th) Aug. 25-31, 2013, Barcelona, Spain.
- 10-th IEEE International Conference on Smart Computing, Networking and Services (SmartCNS-2019), Oct. 21-23, 2019, Shenyang, China.
- International Conference on Global Health Challenges (*GLOBAL HEALTH*)
  (8-th) Sep. 22-26, 2019, Porto, Portugal; (7-th) Nov. 18-22, 2018, Athens, Greece; (6-th) Nov. 12-16, 2017, Barcelona, Spain; (5-th) Oct. 9-13, 2016, Venice, Italy; (4-th) July 19-24, 2015, Nice, France.
- 7-th International Conference on Neurotechnology and Physiological Computing Systems (*NEUROPhyCS 2019*), Sep. 20-21, Vienna, Austria.
- International Conference on Economics of Grids, Clouds, Systems, and Services (*GECON*)
  (16-th) Sep. 17-19, 2019, Leeds, UK; (15-th) Sep. 18-20, 2018, Pisa, Italy; (14-th) Sep. 19-21, 2017, Biarritz-Anglet-Bayonne, France; (13-th) Sep. 20-22, 2016, Athens, Greece; (11-th) Sep. 16-18, 2014, Cardiff, UK; (10-th) Sep. 18-20, 2013, Zaragoza, Spain; (9-th) Nov. 27-28, 2012, Berlin, Germany; (8-th) Dec. 5-6, 2011, Paphos, Cyprus; (7-th) Aug. 30-31, 2010, Ischia, Italy; (6-th) Aug. 24, 2009, Delft, The Netherlands; (5-th) Aug. 25-26, 2008, Las Palmas, Canary Island, Spain; (4-th) Aug. 28, 2007, Rennes, France.
- International Conference on Bioinformatics (*InCoB*)
  (17-th) Sep. 10-12, 2019, Jakarta, Indonesia; (16-th) Sep. 26-28, 2018, New Delhi, India; (15-th) Sep. 21-23, 2016, Singapore; (14-th) Sep. 9-11, 2015, Tokyo, Japan; (first joint GIW-InCoB conference) (13-th) July 31 - Aug. 2, 2014,

Sydney, New South Wales, Australia; (12-th) Sep. 20-22, 2013, Taicang, China; (11-th) Oct. 3-5, 2012, Bangkok, Thailand; (10-th) Nov. 30 - Dec. 3, 2011, Kuala Lumpur, Malaysia; (9-th) Sep. 26-28, 2010, Waseda University, Tokyo, Japan.

- 2019 IEEE International Conference on Internet of Things (*iThings-2019*), July 14-17, 2019, Atlanta, GA.
- International Conference on Smart Grids, Green Communications and IT Energy-aware Technologies (*ENERGY*)
  (9-th) June 2-6, 2019, Athens, Greece; (8-th) May 20-24, 2018, Nice, France; (7-th) May 21-25, 2017, Barcelona, Spain; (6-th) June 26-30, 2016, Lisbon, Portugal; (5-th) May 24-29, 2015, Rome, Italy; (4-th) Apr. 20-24, 2014, Chamonix, France; (3-rd) Mar. 24-29, 2013, Lisbon, Portugal; (2-nd) Mar. 25-29, 2012, St. Maarten, Netherlands Antilles; (1-st) May 22-27, 2011, Venice, Italy.
- International Conference on Physiological Computing Systems (*PhyCS*)
  (5-th) Sep. 19-21, 2018, Seville, Spain; (4-th) July 28-29, 2017, Madrid, Spain; (3-rd) July 29-31, 2016, Lisbon, Portugal; (2-nd) Feb. 11-13, 2015, Angers, France; (1-st) Jan. 7-9, 2014, Lisbon, Portugal.
- IEEE International Conference on Computer and Information Technology (*CIT*)
  (18-th) July 30 - Aug. 3, 2018, Halifax, Canada; (17-th) Aug. 21-23, 2017, Helsinki, Finland; (16-th) Dec. 8-10, 2016, Fiji; (15-th) Oct. 26-28, 2015, Liverpool, England, UK; (13-th) Dec. 3-5, 2013, Sydney, Australia; (11-th) Aug. 31 - Sep. 2, 2011, Paphos, Cyprus; (10-th) June 29 - July 1, 2010, Bradford, UK; (9-th) Oct. 11-14, 2009, Xiamen, China; (8-th) July 8-11, 2008, Sydney, Australia; (7-th) Oct. 16-19, 2007, Aizu, Japan; (6-th) Sep. 20-22, 2006, Seoul, Korea; (5-th) Sep. 21-23, 2005, Shanghai, China; (4-th) Sep. 14-16, 2004, Wuhan, China.
- 20-th IEEE International Conference on High Performance Computing and Communications (*HPCC-2018*), June 28-30, 2018, Exeter, England, UK.
- Eleventh International Conference on Frontier of Computer Science and Technology (*FCST*), June 21-23, 2017, Exeter, UK.
- International Conference on Health Informatics (*HealthInf*)
  (10-th) Feb. 21-23, 2017, Porto, Portugal; (9-th) Feb. 21-23, 2016, Rome, Italy; (8-th) Jan. 12-15, 2015, Lisbon, Portugal; (7-th) Mar. 3-6, 2014, Eseo, Angers, Loire Valley, France; (6-th) Feb. 11-14, 2013, Barcelona, Spain; (5-th) Feb. 1-4, 2012, Vilamoura-Algarve, Portugal; (4-th) Jan. 26-29, 2011, Rome, Italy; (2-nd) Jan. 14-17, 2009, Porto, Portugal; (1-st) Jan. 28-31, 2008, Funchal, Madeira-Portugal.
- International Workshop on Collaboration Technologies and Systems in Healthcare and Biomedical Fields (*CoHeB*), in conjunction with the International Conference on Collaboration Technologies and Systems (*CTS*)
  (5-th) June 1-5, 2015, Atlanta, GA; (4-th) May 19-23, 2014, Minneapolis, MN; (3-rd) May 20-24, 2013, San Diego, CA; (2-nd) May 21-25, 2012, Denver, CO; (1-st) May 23-27, 2011, Philadelphia, PA.
- 14-th IEEE Int'l Workshop on High Performance Computational Biology (*HiCOMB*), in conjunction with the 29-th International Parallel and Distributed Processing Symposium (*IPDPS*), May 25, 2015, Hyderabad, India.
- International Conference on Information Technology in Bio-Medical Informatics (*ITBAM*) (5-th) Sep. 1-5, 2014, Munich, Germany; (4-th) Aug. 26-Aug. 30, 2013, Prague, Czech Republic; (3-rd) Sep. 3-Sep. 7, 2012, Vienna University of Technology, Vienna, Austria; (2-nd) Aug. 29-Sep. 2, 2011, Toulouse, France; (1-st) Aug. 30-Sep. 1, 2010, Bilbao, Spain.
- Symposium on Grid and Distributed Computing (*GDC*)
  (6-th) Nov. 21-23, 2013, Jeju Island, Korea; (5-th) Dec. 16-19, 2012, Kangwondo, Korea; (4-th) Dec. 8-10, 2011, Jeju Island, Korea; (3-rd) Dec. 9-11, 2010, Bali, Indonesia; (2-nd) Dec. 10-12, 2009, Jeju Island, Korea.

- Int'l Conference on ICT as Key Tech. for the Fight against Global Warming (*ICT-GLOW*)
  (2-nd) Sep. 3-Sep. 7, 2012, Vienna, Austria; (1-st) Aug. 29-Sep 2, 2011, Toulouse, France.
- 2012 FTRA International Conference on Intelligent Robotics, Automations, telecommunication facilities, and applications (*IRoA-12*), Aug. 23-25, 2012, Yantai, China.
- Int'l Conf. on Complex Medical Engineering (*CME*), June 1-4, 2012, Richmond, Virginia.
- 12-th IEEE/ACM Int'l Conf. on Grid Computing, Sep. 21-23, 2011, Lyon, France.
- European Health-Grid Conference (*HealthGrid*)
  (9-th) June 27-28, 11, Bristol, UK; (6-th) June 2-4, 08, Chicago; (5-th) Apr. 24-27, 07, Geneva, Switzerland; (4-th) June 7-9, 06, Valencia, Spain; (3-rd) Apr. 7-9, 05, Oxford, UK; (2-nd) Jan. 29-30, 04, Clermont-Ferrand, France.
- Int'l Bioinformatics Workshop (*IBW*), June 4-6, 2010, Wuhan University, Wuhan, China.
- IEEE Symposium on Parallel and Distributed Processing with Applications (*ISPA*)
  (7-th) Aug. 10-12, 09, Chengdu, China; (3-rd) Nov. 2-5, 05, Nanjing, China; (2-nd) Dec. 13-15, 04, Hong Kong.
- Workshop on Challenges for the Application of Grids in Healthcare at the 2009 IEEE Symposium on Cluster Computing and the Grid (*CCGrid*), May 18-21, 2009, Shanghai, China.
- IEEE Symposium on Cluster Computing and the Grid (*CCGrid*)
  (8-th) May 19-22, 2008, Lyon, France; (7-th) May 14-17, 2007, Rio de Janeiro, Brazil.
- International Conference on Bioinformatics Research and Development (*BIRD*)
  (2-nd) July 7-9, 2008, Vienna, Austria; (1-st) Mar. 12-14, 2007, Berlin, Germany.
- 2008 European Congress of the International Federation for Medical and Biological Engineering (*MBEC*), Nov. 23-27, Antwerp, Belgium, 2008.
- International Conference on Life Science Grids (*LSGrid*)
  (4-th) Sep. 6-7, 2007, Univ of Glasgow, Scotland; (3-rd) Oct. 13-14, 2006, Riken Genomic Science Institute, Japan.
- International Conference on Computational Science (*ICCS*), May 27-30, 2007, Beijing, China.
- Int'l Workshop on Bioinformatics and Security (*BIOS*) at the Second Int'l Conference on Availability, Reliability and Security Conference (*AReS*), Apr. 10-13, 2007, Vienna, Austria.
- 2007 IEEE International Symposium on Bioinformatics and Life Science Computing (*BLSC*), May 21-23, 2007, Niagara Falls, Canada.
- First Workshop on High-Performance Computing in Genomics, Proteomics and Transcriptomics (*HPC-GPT*) at the International Symposium on Parallel and Distributed Processing and Applications (*ISPA*), Dec. 1-4, 2006, Sorrento, Italy.
- IEEE Workshop on High-Performance Computing in Medicine and Biology (*HiPCoMB*)
  (2-nd) April 18-20, 2006, Vienna, Austria, held in conjunction with 20-th International Conference on Advanced Information Networking and Applications (*AINA*); (1-st) July 20-22, 2005, Fukuoka, Japan, held in conjunction with 11-th International Conference on Parallel and Distributed Systems (*ICPADS*).
- Workshop on High-Performance Scientific and Engineering Computing (*HPSEC*) at the International Conference on Parallel Processing (*ICPP*)
  (8-th) Aug. 18, 2006, Columbus, OH; (7-th) June 15, 2005, Oslo, Norway; (6-th) Aug. 15, 2004, Montreal, Canada.
- Workshop on Parallel and Distributed Scientific and Engineering Computing with Applications (*PDSEC*) at the International Parallel and Distributed Processing Symposium (*IPDPS*)
  (7-th) Apr. 25-29, 06, Rhodes Island, Greece; (6-th) Apr. 8, 05, Denver, CO; (5-th) Apr. 30, 04, Santa Fe, NM.

  - Workshop on Distributed, High-Performance and Grid Computing in Comp. Biology (*GCCB*) at the 5-th European Conf. on Comp. Biology (*ECCB*), Sep. 10-13, 2006, Eilat, Israel.
  - 2006 IEEE Symposium of Computations in Bioinformatics and Bioscience (*SCBB*) June 22-26, 2006, Hangzhou, China.
  - First European Grid Conference (*EGC*), Feb. 14-16, 2005, Amsterdam, The Netherlands.
  - Workshop on Parallel Bio-Computing (*PBC*) at the 6-th Int'l Conference on Parallel Processing and Applied Mathematics (*PPAM*), Springer LNCS, Sep. 11-14, 2005, Poznan, Poland.
  - 18-th ISCA Int'l Conference on Parallel and Distributed Computing Systems (*PDCS*), Sep. 12-14, 2005, Las Vegas, NV.
  - International Conference on Grid and Cooperative Computing (*GCC*), Springer LNCS (4-th) Nov. 30 - Dec. 3, 2005, Beijing, China; (3-rd) Oct. 21-24, 2004, Wuhan, China.
  - Workshop on Data Mining and the Grid (*DM-Grid*) at the IEEE Int'l Conf. on Data Mining (2-nd) Nov. 27, 2005, New Orleans, LA; (1-st) Nov. 1, 2004, Brighton, UK.
  - European Science Foundation - COST Action 282 Symposium on Knowledge Exploration & Life Science Informatics (*Kelsi*), Springer LNAI, Nov. 25-26, 2004, Milano, Italy.
  - ISSB/ICA International Conference on Bioinformatics and its Applications (*ICBA*), Dec. 16-19, 2004, Fort Lauderdale, FL.
  - International Conference on Parallel and Distributed Processing Techniques and Applications (*PDPTA*), June 24-27, 2002, Las Vegas, NV.

- Conference Reviewing (other than those served on committees)
  - 23-rd Int'l Conference of the European Federation for Medical Informatics (*MIE*), 2011.
  - World Congress on Medical and Health Informatics (*MedInfo*) (2010, 2007, 2004)
  - International Parallel and Distributed Processing Symposium (*IPDPS*) (2006, 2005, 2000).
  - International Symposium on Signal Processing and Information Technology (*ISSPIT*) (2006)
  - 9-th International Conference on Parallel and Distributed Systems (*ICPADS*) (2002)
  - ACM Symposium on Applied Computing (*ACM SAC*) (2002, 2001)

TEACHING

- CSE5304 *High-Performance Computing* (graduate, formerly CSE332)
  - SP17(19), SP14(16), FA12(21), SP10(9), SP09(8), SP07(9), SP05(22)
- CSE5302 *Advanced Computer Architecture* (graduate, formerly CSE340)
  - SP08(23), FA03(23), SP02(13)
- CSE5095 *Research Topics on Exascale Computing*
  - FA14(11)
- CSE4904/4939W/4940 *CSE Senior Design Lab* (undergrad, formerly CSE269/293W)
  - FA16/SP17(16), FA15/SP16(15), FA13/SP14(16), SP12(10), FA10(10), SP10(13), FA08(18), SP06(6)

- CSE4500 *Parallel Systems* (undergrad, formerly CSE228)
  - SP17(16), SP13(11), FA04(36), FA03(45), FA02(46)
- CSE3666/2304 *Computer Architecture* (undergrad, formerly CSE220/201)
  - SP15(50), SP11(19), SP08(13), SP07(16), FA06(30), SP06(19), FA05(27), SP05(25), SP04(28), SP03(32)
- CSE2500 *Introduction to Discrete Systems* (undergrad, formerly CSE254)
  - FA16(40), FA15(68), SP12(44), FA11(57), FA10(35), FA09(53), SP09(34), FA01(38)
- CSE2100 *Data Structures and Intro. to Algorithms* (undergrad, formerly CSE134)
  - SP16(54), FA14(95), FA13(124), FA12(108)
- CSE1100 *Introduction to Computing* (undergrad, formerly CSE123C)
  - FA07(105)
- CS280/491 *Computational Statistics* (at SIUC)
  - FA19(28), FA20(24), FA21(21), FA23(16), FA24(15)

TEACHING (as Instructor at SUNY Buffalo)

- CSE116 *Intro. to Computer Science for Majors (II)* (undergrad) - SP99(12)
- CSE115 *Intro. to Computer Science for Majors (I)* (undergrad) - SP00(91), FA98(31)
- CSE114 *Intro. to Computer Programming (II)* (undergrad) - Summer99(31)
- CSE113 *Intro. to Computer Programming (I)* (undergrad) - FA99(33), Summer98(33)