

# CURRICULUM VITAE

**Feng Luo**

## Contact Information

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## Education

### Ph.D. in Computer Science

The University of Texas at Dallas, Richardson TX, August 2004  
Dissertation: Mining the Gene Microarray Expression Profiles

### M.S. in Computer Science

The University of Texas at Dallas, Richardson TX, May 2001

### M.S. in Physical Chemistry

East China University of Science and Technology, Shanghai China, July 1997

### B.S. in Chemistry

Chengdu University of Science and Technology, Chengdu China, July 1992

## Research Focusing Areas

Bioinformatics, deep learning and application, big data analytics.

## Research and Professional Experiences

Feb. 2021 – present	Marvin J. Pinson, Jr.'46 Distinguished Professor, School of Computing, Clemson University, Clemson, SC
May 2020 – present	Founding Director, Clemson AI Research Institute for Science and Engineering (AIRISE)
Jan. 2006 – present	Assistant/Associate/Full Professor, School of Computing, Clemson University, Clemson, SC
Oct. 2004 – Dec. 2005	Post-doctoral Senior Research Associate, Department of Pathology, the University of Texas Southwestern Medical Center at Dallas, Dallas, TX

Aug 2003 – May 2004

Higher Education Research Experiences (HERE), Microbial Genomics and Ecology Group, Environmental Sciences Division, Oak Ridge National Lab (Department of Energy), Oak Ridge, TN

**Publications (\*my students and postdocs, # as a corresponding author)** (Significant papers: 1 in Nature, 1 in Nature Methods, 5 in Nature Communications, 1 in Molecular Cell, 1 in AAAI, and 1 in EMNLP)

### **Journal Publications**

77. Peng Ni, Fan Nie, Zeyu Zhong, Jinrui Xu, Neng Huang, Jun Zhang, Haochen Zhao, You Zou, Yuanfeng Huang, Jinchun Li, Chuan-Le Xiao, Feng Luo<sup>#</sup>, Jianxin Wang. "DNA 5-methylcytosine detection and methylation phasing using PacBio circular consensus sequencing." **Nature Communications** 14, 4054, 2023.

76. Matthew Costello, Nishant Vishwamitra, Song Liao, Long Cheng, Feng Luo, Hongxin Hu, "COVID-19 and Sinophobia: Detecting Warning Signs of Radicalization on Twitter and Reddit". *Cyberpsychology, Behavior, and Social Networking*, Vol 26, No. 7, 2023.

75. Mingqi Li<sup>\*</sup>, Gabrielle Scronce, Christian Finetto, Kristen Coupland, Matthew Zhong<sup>\*</sup>, Melanie E. Lambert<sup>\*</sup>, Adam Baker, Feng Luo, and Na Jin Seo. "Application of Deep Learning Algorithm to Monitor Upper Extremity Task Practice." *Sensors* 23, no. 13 (2023): 6110.

74. Fan Zhuang, Jingyi Huang, Hongguang Li, Xing Peng, Ling Xia, Lei Zhou, Teng Zhang, Zhenghua Liu, Qiang He, Feng Luo, Huaqun Yin, Delong Meng, "Biogeochemical behavior and pollution control of arsenic in mining areas: A review". *Frontiers in Microbiology*, Vol 14, 2023.

73. Zhuo-Xing Shi, Zhi-Chao Chen, Jia-Yong Zhong, Kun-Hua Hu, Ying-Feng Zheng, Ying Chen, Shang-Qian Xie, Xiao-Chen Bo, Feng Luo<sup>#</sup>, Chong Tang, Chuan-Le Xiao, Yi-Zhi Liu High-throughput and high-accuracy single-cell RNA isoform analysis using PacBio circular consensus sequencing. **Nature Communications**, 14, 2631, 2023.

72. Jia-Yong Zhong, Longjian Niu, Zhuo-Bin Lin, Xin Bai, Ying Chen, Feng Luo, Chunhui Hou, Chuan-Le Xiao, "High-throughput Pore-C reveals the single-allele topology and cell type-specificity of 3D genome folding". **Nature Communications**, 14, 1250, 2023.

71. Neng Huang, Minghua Xu, Fan Nie, Peng Ni, Chuan-Le Xiao, Feng Luo, Jianxin Wang, "NanoSNP: a progressive and haplotype-aware SNP caller on low-coverage nanopore sequencing data", *Bioinformatics*, Volume 39, Issue 1, January 2023, btac824.

70. Bo Wu<sup>\*</sup>, Qibin Yu, Zhanao Deng, Yongping Duan, Feng Luo<sup>#</sup>, Frederick Gmitter Jr, "A chromosome-level phased genome enabling allele-level studies in sweet orange: a case study on citrus Huanglongbing tolerance", *Horticulture Research*, Volume 10, Issue 1, January 2023, uhac247.

69. Erich D Jarvis, Giulio Formenti, Arang Rhie, Andrea Guarracino, Chentao Yang, Jonathan Wood, Alan Tracey, Francoise Thibaud-Nissen, Mitchell R Vollger, David Porubsky, Haoyu Cheng, Mobin Asri, Glennis A Logsdon, Paolo Carnevali, Mark JP Chaisson, Chen-Shan Chin, Sarah Cody, Joanna Collins, Peter Ebert, Merly Escalona, Olivier Fedrigo, Robert S Fulton, Lucinda L Fulton, Shilpa Garg, Jennifer L Gerton, Jay Ghurye, Anastasiya Granat, Richard E Green, William Harvey, Patrick Hasenfeld, Alex Hastie, Marina Haukness, Erich B Jaeger, Miten Jain, Melanie Kirsche, Mikhail Kolmogorov, Jan O Korbel, Sergey Koren, Jonas Korlach,

Joyce Lee, Daofeng Li, Tina Lindsay, Julian Lucas, Feng Luo, Tobias Marschall, Matthew W Mitchell, Jennifer McDaniel, Fan Nie, Hugh E Olsen, Nathan D Olson, Trevor Pesout, Tamara Potapova, Daniela Puiu, Allison Regier, Jue Ruan, Steven L Salzberg, Ashley D Sanders, Michael C Schatz, Anthony Schmitt, Valerie A Schneider, Siddarth Selvaraj, Kishwar Shafin, Alaina Shumate, Nathan O Stitzel, Catherine Stober, James Torrance, Justin Wagner, Jianxin Wang, Aaron Wenger, Chuanle Xiao, Aleksey V Zimin, Guojie Zhang, Ting Wang, Heng Li, Erik Garrison, David Haussler, Ira Hall, Justin M Zook, Evan E Eichler, Adam M Phillippy, Benedict Paten, Kerstin Howe, Karen H Miga, “Semi-automated assembly of high-quality diploid human reference genomes”. **Nature**, 611, 519–531, 2022.

68. Fei Ding\*, Yin Yang, Hongxin Hu, Venkat Krovi, Feng Luo#, “Dual-Level Knowledge Distillation via Knowledge Alignment and Correlation”, *IEEE Transactions on Neural Networks and Learning Systems*, 2022.

67. Saroj Parajuli, Heqiang Huo, Fred Gmitter, Yongping Duan, Feng Luo, Zhanao Deng, “Editing the CsDMR6 gene in citrus results in resistance to the bacterial disease citrus canker”, *Horticulture Research*, vol 9, 2022.

66. Ximei Zhai, Fei Ding, Zeyu Zhao, Aaron Santomauro, Feng Luo, Jianhua Tong, “Predicting the formation of fractionally doped perovskite oxides by a function-confined machine learning method”, *Communications Materials*, 2022.

65. Jun Zhang, Fan Nie, Neng Huang, Peng Ni, Feng Luo, Jianxin Wang, Fec: a fast error correction method based on two-rounds overlapping and caching, *Bioinformatics*, Volume 38, Issue 19, Pages 4629–4632, 2022.

64. Neng Huang, Fan Nie, Peng Ni, Feng Luo# and Jinxin Wang, “SACall: a neural network basecaller for Oxford Nanopore sequencing data based on self-attention mechanism,” *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, vol. 19, no. 1, pp. 614–623, 1 Jan.-Feb. 2022.

63. Li Yan, Haiying Shen, Juanjuan Zhao, chengzhong Xu, Feng Luo, Chenxi Qiu, Zhe Zhang, Shohaib Mahmud, “CatCharger: Deploying In-motion Wireless Chargers in a Metropolitan Road Network via Categorization and Clustering of Vehicle Traffic”. in *IEEE Internet of Things Journal*, vol. 9, no. 12, pp. 9525–9541, 15 June15, 2022.

62. Peng Ni, Neng Huang, Fan Nie, Jun Zhang, Zhi Zhang, Bo Wu\*, Lu Bai, Wende Liu, Chuanle Xiao, Feng Luo#, Jianxin Wang, “Genome-wide Detection of Cytosine Methylations in Plant from Nanopore Data Using Deep Learning”. **Nature Communications**, 12, 5976, 2021.

61. Matthew Costello, Long Cheng, Feng Luo, Hongxin Hu, Song Liao, Nishant Vishwamitra, Mingqi Li, Ebuka Okpala, “COVID-19: A Pandemic of Anti-Asian Cyberhate”. *Journal of Hate Studies*, 17(1), pp.108–118, 2021.

60. Neng Huang, Fan Nie, Peng Ni, Xin Gao, Feng Luo#, Jianxin Wang, “BlockPolish: accurate polishing of long-read assembly via block divide-and-conquer”, *Briefings in Bioinformatics*, bbab405, 2021.

59. Bo Wu\*, Na Li, Zhanao Deng, Feng Luo, Yongping Duan, “Selection and Evaluation of a Thornless and HLB-Tolerant Bud-Sport of Pummelo Citrus with an Emphasis on Molecular Mechanisms”. *Frontiers in Plant Science*, Volume 12, Page 1837, 2021.

58. Neng Huang, Fan Nie, Peng Ni, Feng Luo, Xin Gao, Jianxin Wang “NeuralPolish: a novel Nanopore polishing method based on alignment matrix construction and orthogonal Bi-GRU Networks”. *Bioinformatics*, Volume 37, Issue 19, 1 Pages 3120–3127, October 2021.
57. Ying Chen, Fan Nie, Shang-Qian Xie, Ying-Feng Zheng, Qi Dai, Thomas Bray, Yao-Xin Wang, Jian-feng Xing, Zhi-Jian Huang, De-Peng Wang, Li-Juan He, Feng Luo<sup>#</sup>, Jian-Xin Wang, Yi-Zhi Liu, and Chuan-Le Xiao, “Efficient assembly of Nanopore reads via highly accurate and intact error correction”. **Nature Communications**, 12, 60, 2021.
56. Yunpei Xu, Hongdong Li, Yi Pan, Feng Luo, Jianxin Wang. “A Gene Rank Based Approach for Single Cell Similarity Assessment and Clustering”. *IEEE/ACM transactions on computational biology and bioinformatics*, 18(2), 431-442, 2021.
55. Yuting Li, Zhijun Dai, Dan Cao, Feng Luo, Yuan Chen, and Zheming Yuan. "Chi-MIC-share: a new feature selection algorithm for quantitative structure–activity relationship models." *RSC Advances* 10, no. 34, 19852-19860, 2020.
54. Eugene H. Bishop, Rohit Kumar, Feng Luo, Christopher Saski, Rajandeep S. Sekhon. “Genome-wide identification, expression profiling, and network analysis of AT-hook gene family in maize”, *Genomics*, Vol 112, issue 2, 1233-1244, 2020.
53. Xingyu Liao, Min Li, You Zou, Fangxiang Wu, Yi Pan, Feng Luo, Jianxin Wang, “Improving de novo assembly based on read classification”, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, Vol 17, Issue 1, 177-188, 2020.
52. Tao Li, Xiankai Zhang, Feng Luo, Fangxiang Wu, and Jianxin Wang, “MultiMotifMaker: a multi-thread tool for identifying DNA methylation motifs from Pacbio reads”, *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, Vol 17, Issue 1, 220-225, 2020.
51. Rajandeep S. Sekhon, Christopher Saski, Rohit Kumar, Barry S. Flinn, Feng Luo, Timothy M. Beissinger, Arlyn J. Ackerman, Matthew W. Breitzman, William C. Bridges, Natalia de Leon, Shawn M. Kaeppler. “Integrated Genome-Scale Analysis Identifies Novel Genes and Networks Underlying Senescence in Maize”. *Plant Cell*, 31(9):1968-1989, 2019.
50. Peng Ni, Neng Huang, Zhi Zhang, De-Peng Wang, Fan Liang, Yu Miao, Chuan-Le Xiao, Feng Luo<sup>#</sup>, Jianxin Wang, “DeepSignal: detecting DNA methylation state from Nanopore sequencing reads using deep-learning”, *Bioinformatics*, 35(22), 4586-4595, 2019.
49. Elizabeth A Cooper, Zachary W Brenton, Barry S Flinn, Jerry Jenkins, Shengqiang Shu, Dave Flowers, Feng Luo, Yunsheng Wang\*, Penny Xia, Kerrie Barry, Chris Daum, Anna Lipzen, Yuko Yoshinaga, Jeremy Schmutz, Christopher Saski, Wilfred Vermerris, Stephen Kresovich. “A new reference genome for *Sorghum bicolor* reveals high levels of sequence similarity between sweet and grain genotypes: implications for the genetics of sugar metabolism”, *BMC Genomics*, 20:420, 2019.
48. Chuan-Le Xiao, Shang-Qian Xie, Qing-Biao Xie, Zhao-Yu Liu, Jian-Feng Xing, Kai-Kai Ji, Jun Tao, Liang-Ying Dai, and Feng Luo<sup>#</sup>, “N6-Methyladenine DNA modification in *Xanthomonas oryzae* pv. *oryzicola* genome”, *Scientific reports*, 8:16272, 2018.
47. Chuan-Le Xiao, Song Zhu, Minghui He, De Chen, Qian Zhang, Ying Chen, Guoliang Yu, Jinbao Liu, Shang-Qian Xie, Feng Luo, Zhe Liang, De-Peng Wang, Xiao-Chen Bo, Xiao-Feng Gu, Kai Wang, Guang-Rong Yan, “N6-Methyladenine DNA Modification in the Human Genome”, *Molecular Cell*, Volume 71, Issue 2, page 306-319.e7, 2018.

46. Chengqian Lu, Mengyun Yang, Feng Luo, Fang-Xiang Wu, Min Li, Yi Pan, Yaohang Li, Jianxin Wang. "Prediction of lncRNA-disease associations based on inductive matrix completion", *Bioinformatics*, 34(19), 3357-3364, 2018.
45. Clemer Abad, Melissa M. Cook, Lei Cao, Julie R. Jones, Nalini R. Rao, Lynn Dukes-Rimsky, Rini Pauly, Cindy Skinner, Yunsheng Wang, Feng Luo, Roger E. Stevenson, Katherina Walz and Anand K. Srivastava, "A Rare De Novo *RAII* Gene Mutation Affecting BDNF-Enhancer-Driven Transcription Activity Associated with Autism and Atypical Smith-Magenis Syndrome Presentation", *Biology* 2018, 7, 31.
44. Xiao-Lin Chen, Xin Xie, Liye Wu, Caiyun Liu, Lirong Zeng, Xueping Zhou, Feng Luo, Guo-Liang Wang, Wende Liu. "Proteomic analysis of ubiquitinated proteins in rice (*Oryza sativa*) after treatment with pathogen-associated molecular pattern (PAMP) elicitors", *Frontiers in Plant Science*, Vol 9, 1064, 2018.
43. Chuan-Le Xiao, Ying Chen, Shang-Qian Xie, Kai-Ning Chen, Yan Wang, Yue Han, Feng Luo<sup>#</sup>, Zhi Xie. "MECAT: fast mapping, error correction, *de novo* assembly for single-molecule sequencing reads", *Nature Methods*, 14(11):1072-1074, 2017.
42. Yingying Li, Wu Chen, Yunsheng Wang, Kun Luo, Yue Li, Lianyang Bai, Feng Luo<sup>#</sup>. "Identifying and sequencing a Mycobacterium sp. strain F4 as a potential bioremediation agent for quinclorac", *PLOS ONE*, 12(10): e0185721, 2017.
41. Melissa M Doud, Yungsheng Wang<sup>\*</sup>, Michelle T Hoffman, Christina L Latza, Weiqi Luo, Cheryl M Armstrong, Tim R Gottwald, Liangying Dai, Feng Luo and Yongping Duan. "Solar thermotherapy reduces the titer of *Candidatus Liberibacter asiaticus* and enhances canopy growth by altering gene expression profiles in HLB-affected citrus plants", *Horticulture Research*, 4, 17054, 2017.
40. Pengfei Xuan<sup>\*</sup>, Walter B. Ligon, Pradip K Srimani, Rong Ge and Feng Luo<sup>#</sup>. "Accelerating big data analytics on HPC clusters using two-level storage", *Parallel Computing*, 61, 18-34, 2017.
39. Yunsheng Wang<sup>\*</sup>, Lijuan Zhou, Xiaoyue Yu, Ed Stover, Feng Luo<sup>#</sup>, and Yongping Duan. "Transcriptome Profiling of Huanglongbing (HLB) Tolerant and Susceptible Citrus Plants Reveals the Role of Basal Resistance in HLB Tolerance", *Frontiers in Plant Science*, 7: 933, 2016.
38. Yuan Chen, Ying Zeng, Feng Luo, Zheming Yuan. "A New Algorithm to Optimize Maximal Information Coefficient", *PLoS ONE*, 11(6):e0157567, 2016.
37. Nan Zhao, Brigitte E. Martin, Chun-Kai Yang, Feng Luo, and Xiu-Feng Wan. "Association analyses of large-scale glycan microarray data reveal novel host-specific substructures in influenza A virus binding glycans", *Scientific Reports*, 5:15778, 2015.
36. Zhao Chen, Hongye Wang, Claudia Ionita, Feng Luo, and Xiuping Jiang. "Effects of Chicken Litter Storage Time and Ammonia Content on Thermal Resistance of Desiccation-Adapted *Salmonella* spp.", *Applied and environmental microbiology*, volume 81, issue 19, 6883-6889, 2015.
35. Yunsheng Wang<sup>\*</sup>, Zhenchuan Mao, Jin Yan, Xinyue Cheng, Feng Liu, Luo Xiao, Liangying Dai, Feng Luo, and Bingyan Xie. "Identification of MicroRNAs in *Meloidogyne incognita* Using Deep Sequencing". *PloS ONE*, 10(8):e0133491, 2015.

34. Yunsheng Wang\*, Lijuan Zhou, Dazhi Li, Liangying Dai, Amy Lawton-Rauh, Pradip K. Srimani, Yongping Duan, Feng Luo#. "Genome-wide Comparative Analysis Reveals Similar Types of NBS Genes in Hybrid Citrus sinensis Genome and Original Citrus clementina Genome and Provides New Insights into Non-TIR NBS Genes", PLoS ONE, 10(3): e0121893, 2015.
33. Adel Dayarian, Roberto Romero, Zhiming Wang\*, Michael Biehl<sup>5</sup>, Erhan Bilal<sup>6</sup>, Sahand Hormoz, Pablo Meyer, Raquel Norel, Kahn Rhrissorakkrai, Gyan Bhanot, Feng Luo<sup>#</sup> and Adi L. Tarca. "Predicting protein phosphorylation from gene expression: top methods from the IMPROVER Species Translation Challenge". Bioinformatics, Vol. 31 no. 4, pages 462–470, 2015.
32. Min Liu, Kun Luo, Yunsheng Wang, Aiping Zeng, Xiaomao Zhou, Feng Luo, Lianyang Bai, "Isolation, Identification and Characteristics of an Endophytic Quinclorac Degrading Bacterium *Bacillus megaterium* Q3", PLoS ONE, 9(9):e108012, 2014.
31. Qiliang Wang, Onur G Apul, Pengfei Xuan, Feng Luo, Tanju Karanfil. "Development of a 3D QSPR model for adsorption of aromatic compounds by carbon nanotubes: comparison of multiple linear regression, artificial neural network and support vector machine". RSC Advances, volume 3, issue 46, 23924-23934, 2013.
30. Scott M. Gibson, Stephen P. Ficklin, Sven Isaacson, Feng Luo, Frank A. Feltus, Melissa C. Smith. "Massive-Scale Gene Co-expression Network Construction and Robustness Testing Using Random Matrix Theory". PLoS ONE, 8(2):e55871, 2013.
29. Anna Blenda, David Fang, Jean-francois Rami, Olivier Garsmeur, Feng Luo, Jean-Marc Lacape. "A high-density consensus map of tetraploid cotton that integrates multiple component maps through molecular marker redundancy check". PLoS ONE, 7(9):e45739, 2012.
28. Jacob B. Spangler, Stephen P. Ficklin, Feng Luo, Michael Freeling, F. Alex Feltus. "Conserved Non-Coding Regulatory Signatures in *Arabidopsis* Co-Expressed Gene Modules". PLoS ONE, 7(9):e45041, 2012.
27. Yuehua Zhang\*, Bo Li\*, Pradip K Srimani, Xuwen Chen, Feng Luo#. "Predicting synthetic lethal genetic interactions in *Saccharomyces cerevisiae* using short polypeptide clusters". Proteome Science, 10 (Suppl 1):S4, 2012.
26. Ye Deng, Yihuei Jiang, Yunfeng Yang, Zhili He, Feng Luo, Jizhong Zhou. "Molecular Ecological Network Analyses", BMC Bioinformatics, 13:113, 2012.
25. Pengfei Xuan\*, Yuehua Zhang\*, Tzuen-rong Jeremy Tzeng, Xiu-Feng Wan, Feng Luo#. "A quantitative structure-activity relationship (QSAR) study on glycan array data to determine the specificities of glycan binding proteins". Glycobiology, volume 22, issue 4, 552-560, 2012.
24. Xumeng Li\*, F Alex Feltus, Xiaoqian Sun, James Z. Wang, Feng Luo#. "Identifying differentially expressed genes in cancer patients using a non-parameter Ising model". PROTEOMICS, volume 11, issue 19, p3845-3852, 2011.
23. Jizhong Zhou, Ye Deng, Feng Luo, Zhili He, Yunfeng Yang. "Phylogenetic Molecular Ecological Network of Soil Microbial Communities in Response to Elevated CO<sub>2</sub>". mBio 2(4):e00122-11, 2011.
22. Randhir Singh, Jinkyung Kim, Marion W. Shepherd Jr, Feng Luo and Xiuping Jiang. "Determining thermal inactivation of *Escherichia coli* O157:H7 in fresh compost by simulating

early phases of composting process”. *Applied and Environmental Microbiology*, vol. 77, p4126-4135, 2011.

21. Bo Li\*, Weiguo Cao, Jizhong Zhou, Feng Luo#. “Understanding and predicting synthetic lethal genetic interactions in *Saccharomyces cerevisiae* using domain genetic interactions”. *BMC Systems Biology*, 5:73, 2011.

20. Jizhong Zhou, Ye Deng, Feng Luo, Zhili He, Qichao Tu, Xiaoyang Zhi. “Functional molecular ecological networks”. *mBio*, 1(4):e00169-10, 2010.

19. Stephen P. Ficklin, Feng Luo, F. Alex Feltus. “The association of multiple interacting genes with specific phenotypes in rice (*Oryza Sativa*) using gene co-expression networks”. *Plant Physiology*, 154 (1): p. 13-24, 2010.

18. Randhir Singh, Xiuping Jiang, Feng Luo. “Thermal Inactivation of Heat-shocked *Escherichia coli* O157:h7, *Salmonella* and *Listeria monocytogenes* in Dairy Compost”. *Journal of Food Protection*. Volume 73, Number 9, pp. 1633-1640(8), 2010.

17. Aifen Zhou, Zhili He, Alyssa M. Redding-Johanson, Aindrila Mukhopadhyay, Christopher L. Hemme, Marcin P. Joachimiak, Feng Luo, Ye Deng, Kelly S. Bender, Qiang He, Jay D. Keasling, David A. Stahl, Matthew W. Fields, Terry C. Hazen, Adam P. Arkin, Judy D. Wall, Jizhong Zhou. “Hydrogen peroxide-induced oxidative stress responses in *Desulfovibrio vulgaris* Hildenborough”. *Environmental microbiology*. Volume 12, Number 10, pp. 2645-2657(13), 2010.

16. Roger L. Chang, Feng Luo, Stuart Johnson and Richard H. Scheuermann. “Deterministic Graph-Theoretic Algorithm for Detecting Modules in Biological Interaction Networks”. *International Journal of Bioinformatics Research and Applications (IJBRA)*. Vol. 6, No. 2, 101-119, 2010.

15. Jinkyung Kim, Feng Luo, and Xiuping Jiang. “Factors Impacting the Regrowth of *Escherichia coli* O157:H7 in Dairy Manure Compost”. *Journal of Food Protection*, Volume 72, Number 7, pp. 1576-1584, 2009.

14. Feng Luo#, Bo Li\*, Xiu-Feng Wan, Richard H. Scheuermann. “Core and periphery structures in protein interaction networks”. *BMC Bioinformatics*, 10 (Suppl 4):S8, 2009. Among Top 10 most viewed BMC bioinformatics articles in last year reported in July 2011.

13. Yunfeng Yang, Daniel P. Harris, Feng Luo, Marcin Joachimiak, Liyou Wu, Paramvir Dehal, Janet Jacobsen, Zamin Yang, Haichun Gao, Adam P. Arkin, Anthony V. Palumbo and Jizhong Zhou. “Snapshot of Iron Response in *Shewanella oneidensis* by Gene Network Reconstruction”. *BMC Genomics*, 10:131, 2009.

12. Xiu-Feng Wan, Tung Nguyen, C. Todd Davis, Catherine B. Smith, Zi-Ming Zhao, Margaret Carrel, Kenjiro Inui, Hoa T. Do, Duong T. Mai, Samadhan Jadhao, Amanda Balish, Feng Luo, Michael Emch, Yumiko Matsuoka, Nancy J. Cox, Cam V. Nguyen, Alexander Klimov, and Ruben O. Donis. “Evolution of Highly Pathogenic H5N1 Avian Influenza Viruses in Vietnam between 2001 and 2007: Introduction, Reassortment, and Emergence of Novel Genotypes”, *PLOS One*, 3(10): e3462, 2008.

11. Feng Luo#, James Z. Wang, Eric Promislow. “Exploring Local Community Structures in Large Networks”, *Web Intelligence and Agent Systems*, vol. 6, Number 4, 387-400, 2008.

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8. Feng Luo<sup>#</sup>, Yunfeng Yang, Jianxin Zhong, Haichun Gao, Latifur Khan, Dorothea K. Thompson, Jizhong Zhou. "Constructing gene co-expression networks and predicting functions of unknown genes by random matrix theory". BMC Bioinformatics 8:299, 2007.
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4. Latifur Khan, Feng Luo. "Hierarchical Clustering of Complex Data". Special issue of International Journal on Artificial Intelligence Tools, Vol. 14, No. 5, 791-809, 2005.
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2. Gang Zhao, Feng Luo, Yong-xiang Ma. "Synthesis and characterization of organometallic thio-Schiff bases and their copper (II) chelates". Transition Metal Chemistry (Dordrecht, Netherlands), 19(6), 567-570, 1994.
1. Gang Zhao, Feng Luo, Yan Cao, Shikui Liu. "Synthesis and characterization of ferrocene-containing thio-Schiff bases and their dicyclopentadienyltitanium(IV) complexes". Synthesis and Reactivity in Inorganic and Metal-Organic Chemistry, 24(4), 691-701, 1994.

#### **Conference Proceedings (Reviewed)**

35. Song Liao, Ebuka Okpala, Long Cheng, Mingqi Li<sup>\*</sup>, Nishant Vishwamitra, Hongxin Hu, Feng Luo, and Matthew Costello. "Analysis of COVID-19 Offensive Tweets and Their Targets". In Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD '23), 4473–4484, 2023.
34. Okpala, Ebuka, Long Cheng, Nicodemus Mbwanbo, and Feng Luo. "AAEBERT: Debiasing BERT-based Hate Speech Detection Models via Adversarial Learning." In 2022 21st IEEE International Conference on Machine Learning and Applications (ICMLA), pp. 1606-1612, 2022.



33. Mingqi Li\*, Fei Ding, Dan Zhang, Long Cheng, Hongxin Hu, Feng Luo<sup>#</sup>, “Multi-level Distillation of Semantic Knowledge for Pre-training Multilingual Language Model”, EMNLP, 3097-3106, 2022.
32. Siyuan Shen, Tianjia Shao, Kun Zhou, Chenfanfu Jiang, Feng Luo, Yin Yang. “HoD-Net: High-order Differentiable Deep Neural Networks and Applications”, AAAI, 8249-8258, 2022.
31. Nishant Vishwamitra, Hongxin Hu, Feng Luo, Long Cheng. “Towards Understanding and Detecting Cyberbullying in Real-world Images”, Proceedings of the Network and Distributed System Security Symposium (NDSS) 2021.
30. Fei Ding\*, Hongda Li, Feng Luo<sup>#</sup>, Hongxin Hu, Long Chen, Hai Xiao, Rong Ge. “DeepPower: Non-intrusive and Deep Learning-based Detection of IoT Malware Using Power Side Channels”, Proceedings of the 15th ACM Asia Conference on Computer and Communications Security (Asia CCS 20), pp. 33-46, October 2020. (Acceptance rate 21.75%).
29. Wyatt Dorris, Ruijia Hu, Nishant Vishwamitra, Feng Luo<sup>#</sup>, and Matthew Costello. “Towards Automatic Detection and Explanation of Hate Speech and Offensive Language”. In *Proceedings of the Sixth International Workshop on Security and Privacy Analytics*, pp. 23-29, 2020.
28. Ruijia Hu, Wyatt Dorris, Nishant Vishwamitra, Feng Luo<sup>#</sup>, and Matthew Costello. “On the Impact of Word Representation in Hate Speech and Offensive Language Detection and Explanation”. In *Proceedings of the Tenth ACM Conference on Data and Application Security and Privacy*, pp. 171-173, 2020.
27. Neng Huang, Fan Nie, Peng Ni, Feng Luo, Jianxin Wang. “An attention-based neural network basecaller for Oxford Nanopore sequencing data”. 2019 IEEE International Conference on Bioinformatics and Biomedicine (IEEE BIBM 2019), pp 390-394, San Diego, USA 2019, (Acceptance rate 18.42%).
26. Yunpei Xu, Hongdong Li, Yi Pan, Feng Luo and Jianxin Wang, “BioRank: A similarity assessment method for single cell clustering”. IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pp 157-162, Madrid, Spain, December 2018. (Acceptance rate 19.6%).
25. Xiang Zhang\*, Nishant Vishwamitra, Hongxin Hu, Feng Luo<sup>#</sup>, “CrescendoNet: A Simple Deep Convolutional Neural Network with Ensemble Behavior”, in 17th International Conference on Machine Learning and Applications (ICMLA), 311-317, Orlando USA, December 2018.
24. Pengfei Xuan\*, Feng Luo<sup>#</sup>, Rong Ge, Pradip K Srimani. “Dynamic Management of In-memory Storage for Efficiently Integrating Compute- and Data-intensive Computing on HPC Systems”. 17<sup>th</sup> IEEE/ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid), 549-558, Madrid Spain, May 2017, (Acceptance rate 23%).
23. Li Yan, Haiying Shen, Juanjuan Zhao, Chengzhong Xu, Feng Luo, Chenxi Qiu, “CatCharger: Deploying Wireless Charging Lanes in a Metropolitan Road Network through Categorization and Clustering of Vehicle Traffic”. IEEE International Conference on Computer Communications (InfoCom), Atlanta USA, May 2017. (Acceptance rate 20.93%).
22. Nishant Vishwamitra, Xiang Zhang\*, Jonathan Tong, Hongxin Hu, Feng Luo, Robin Kowalski, and Joseph Mazer. “MCDefender: Toward Effective Cyberbullying Defense in Mobile Online Social Networks”. In Proceedings of the 3rd ACM on International Workshop on Security And Privacy Analytics (IWSPA '17), 37-42, New York USA, March, 2017.

21. Yuehua Zhang\*, Pengfei Xuan\*, Yunsheng Wang\*, Pradip K. Srimani, Feng Luo#. "A *de novo* Genome Assembler based on MapReduce and Bi-directed de Bruijn Graph". IEEE International Conference on Bioinformatics and Biomedicine (BIBM), pp 65-71, Shenzhen China, December 2016, (Acceptance rate 19%).
20. Xiang Zhang\*, Jonathan Tong\*, Nishant Vishwamitra, Elizabeth Whittake, Joseph P. Mazer, Robin Kowalski, Jamie Macbeth, Edward Dillon, Hongxin Hu, Feng Luo#. "Cyberbullying Detection with a Pronunciation Based Convolutional Neural Network", in 15th International Conference on Machine Learning and Applications (ICMLA), pp740-745, Anaheim USA, December 2016.
19. Feng Luo# and Pradip k. Srimani. "New Biology Inspired Anonymous Distributed Algorithms to compute Dominating and Total Dominating Sets in Network Graphs", 18th Workshop on Advances in Parallel and Distributed Computational Models (APDCM), pp 517-524, Chicago USA, May 2016.
18. Pengfei Xuan\*, Jeffrey Denton, Pradip K. Srimani, Rong Ge, and Feng Luo#. 2015. "Big data analytics on traditional HPC infrastructure using two-level storage". In Proceedings of the 2015 International Workshop on Data-Intensive Scalable Computing Systems (DISCS), Austin USA, November 2015.
17. Heshan Sun, Feng Luo, Jake London, Xiong Jiao. "Fashionable Technology, Fashion Waves, and Post-Adoption Regret and Satisfaction". Thirty Fifth International Conference on Information Systems (ICIS), Auckland New Zealand, December 2014.
16. Sufeng Niu, Guangyu Yang\*, Nilim Sarma, Pengfei Xuan, Melissa C. Smith, Pradip Srimani, Feng Luo#. "Combining Hadoop and GPU to Preprocess Large Affymetrix Microarray Data". IEEE International conference on Big Data (IEEE BigData), pp.692-700, Washington DC USA, October 2014, (Acceptance rate 18.5%).
15. Lu Zhang\*, Yunsheng Wang\*, Pengfei Xuan\*, Alexander Duvall\*, Jonathan Lowe\*, Yanyan Wang\*, Arvind Subramanian\*, Pradip K Srimani, Feng Luo#, Yongping Duan. "Sesame: A new bioinformatics semantic workflow design system". 2013 IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 504-508, Shanghai China, December 2013.
14. Aditya Sriram\*, Feng Luo#. "O-linked Glycosylation Site Prediction Using Ensemble of Graphical Models". 11<sup>th</sup> International Conference on Machine Learning and Applications (ICMLA), 563-568, Boca Raton USA, December 2012.
13. Wei Shi, Feng Luo, Pradip Srimani. "A New Hierarchical Structure of Star Graphs and Applications". Distributed Computing and Internet Technology, Lecture Notes in Computer Science, Volume 7154, 2012, pp 267-268, 2012.
12. Bo Li\*, Yuehua Zhang\*, Pradip K. Srimani, Feng Luo#. "Predicting Yeast Synthetic Lethal Genetic Interactions using short polypeptide clusters". IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 185-190, Atlanta USA, November 2011, (Acceptance rate 19.73%).
11. Xumeng Li\*, Xiaoqian Sun, F. Alex Feltus, James Z. Wang, Feng Luo#. "A non-parameter Ising model for network-based identification of differentially expressed genes in recurrent breast cancer patients". IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 214-217, Hong Kong China, December 2010.

10. Bo Li\*, Feng Luo#, James Z. Wang, F. Alex Feltus, Jizhong Zhou. “Effectively integrating information content and structural relationship to improve gene ontology based semantic similarity between proteins”. The 2010 International Conference on Bioinformatics & Computational Biology (BioComp), 166-172, Los Vegas USA, July 2010.
9. Bo Li\*, Feng Luo#. “Predicting yeast synthetic lethal genetic interactions using protein domains”. IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 43-47, Washington DC USA, November 2009.
8. Feng Luo#, Thomas Grindinger\*, Xiu-Feng Wan, Richard H. Scheuermann. “Exploring core/periphery structures in protein interaction networks provides structure-property relation insights”. IEEE International Conference on Bioinformatics and Biomedicine (BIBM), 179-186, Philadelphia USA, November 2008, (Acceptance rate 24.36%).
7. Roger L. Chang, Feng Luo, Stuart Johnson and Richard H. Scheuermann. “Deterministic Graph-Theoretic Algorithm for Detecting Modules in Biological Interaction Networks”. The 5<sup>th</sup> Annual Biotechnology and Bioinformatics Symposium (BIOT), 1-10, Arlington, Texas, October 2008.
6. Yunfeng Yang, Daniel P. Harris, Feng Luo, Liyou Wu, Andrea B. Parsons, Anthony V. Palumbo and Jizhong Zhou. “Physiological and Transcriptomic Analyses to Characterize the Function of Fur and Iron Response in *Shewanella oneidensis*”. The 2007 International Conference on Bioinformatics & Computational Biology (BioComp), 707-713, Las Vegas, USA, June 2007.
5. Feng Luo#, James Z. Wang, Eric Promislow. “Exploring Local Community Structures in Large Networks”, IEEE/WIC/ACM International Conference on Web Intelligence (WI 2006), 233-239, Hong Kong China, December 2006 (Acceptance rate: 17.91%).
4. Feng Luo#, Richard Scheuermann. “Detecting Functional Modules from Protein Interaction Networks”. Symposium of Computations in Bioinformatics and Bioscience (SCBB), 123-130, Hangzhou China, June 2006.
3. Feng Luo, Kun Tang and Latifur Khan. “Hierarchical Clustering of Gene Microarray Expression Data”. Proc. of Workshop on Clustering High Dimensional Data and its Applications (Conjunction with SDM), 1-10, San Francisco USA, May 2003.
2. Feng Luo, Kun Tang and Latifur Khan. “Hierarchical Clustering of Gene Expression Data”. Proc. of the 3rd IEEE Symposium of Bioinformatics and Bioengineer (BIBE) 2003, 328-335, Washington DC USA, March 2003.
1. Latifur Khan, Feng Luo. “Ontology Construction for Information Selection”, Proc. of the 14th IEEE International Conference on Tools with Artificial Intelligence (ICTAI), 122-127, Crystal City USA, November 2002.

### **Book Chapter**

2. Feng Luo, Pradip K. Srimani and Jizhong Zhou. “Application of Random Matrix to Analyze Biological Data”. in *Handbook of Data Intensive Computing*, Part 4, 711-732. Edited by Borko Furht, Armando Escalante, LexisNexis, Springer, New York, 2011.

1. Feng Luo, Latifur Khan. “Data complexity in clustering analysis of gene microarray expression profiles”. in *Complexity in Pattern Recognition* Edited by Dr. Mitra Basu and Dr. Tin Kam Ho, Springer Verlag, 2006

## **Sponsored Research**

### **Current (9) (>25M)**

“NRT-AI: Harnessing AI for Inverse Design Training in Advanced and Sustainable Composites (IDeAS Composites)”, NSF, PI: Srkanth Pilla, Co-PI: Gang LI, Feng Luo, Patrick Rosopa, Meihua Qian, \$3,000,000, (2023.7-2028.07).

“Virtual Sensor Reconstruction for offroad autonomous vehicle”, Virtual Prototyping of Autonomy-Enabled Ground Systems (VIPR-GS), PI: Feng Luo (33.34%), Co-PI: Venkat N. Krovi, Nianyi Li, \$888,399, (2023.10-2025.10).

“EFRC: Artificially Intelligent Manufacturing Paradigm for Composites (AIM for Composites),” Office of Science, DOE, PI: Srikanth Pilla, Co-PI: Gang Li, Feng Luo (\$1,210,901), Michael Carbajales-Dale, Qiong Zhang, Zhen Li, \$10,350,000, (2022.8-2026.7).

“An Inverse Design Methodology to Fabricate Low-Cost Agile Tools for Manufacturing Lightweight Automotive Components,” DOE-Advanced Manufacturing Office, PI: Srikanth Pilla, Co-PI: Gang Li, Feng Luo (\$898,430), Michael Carbajales-Dale, \$5,160,000 (\$4,000,000 from DOE + \$1,160,000 from Industry) (2022.10-2025.12).

“Redox Cycles of Novel High-Entropy Perovskite Oxides for Clean Fuel Production through Solar Thermochemical Water and Carbon Dioxide Splitting”, DOE, PI: Jianhua Tong, CO-PI: Feng Luo (25%), Kyle Brinkman, \$750,000, (2022.10-2024.9).

“Collaborative Research: SAI-R: Integrative Cyberinfrastructure for Enhancing and Accelerating Online Abuse Research”, NSF, PI: Long Cheng, Co-PI: Dawn Sarno, Matthew Costello, Feng Luo (20%), \$375,000, 2022.05-2025.05.

“Open-Autonomy Verification & Validation Framework”, Virtual Prototyping of Autonomy-Enabled Ground Systems (VIPR-GS), PI: Venkat N. Krovi, Co-PI: Melissa Smith, Feng Luo (16.67%), Rahul Rai, Shyam Ranganathan, Yunyi Jia, \$1,648,690, (2022.8-2024.8).

“MTM2: Drivers of functional redundancy across microbiomes”, NSF, PI: Barbara Campbell, Co-PI: Feng Luo (\$515,730), Anna Seekatz, Sharon Bewick, Vidya Suseela, \$2,500,000, (2020.10-2025.9).

“ABI Innovation: Fast Algorithms and Tools for Single-Molecule Sequencing Reads”, NSF, PI: Feng Luo (40%), Co-PI: Zijun Wang, Pradip Srimani, \$914,857, (2018.6-2023.5).

### **Completed (19) (>9M)**

“MRI: Acquisition of a Cyberinstrument for AI-Enabled Computational Science & Engineering”, NSF, PI: Amy Apon; Co-PI: Feng Luo (10%), Kuang-Ching Wang, Mashrur Chowdhury, Dvora Perahia, \$561,000, (2020.10-2023.9).

“Deep Reinforcement Learning Approach to CPS Vehicle Re-envisioning”, Virtual Prototyping of Autonomy-Enabled Ground Systems (VIPR-GS), PI: Venkat N. Krovi, Co-PI: Melissa Smith, Umesh Vaidya, Phanindra Tallapragada, Feng Luo (20%), \$1,035,000, (2020.7-2023.7).

“Travel: NSF Student Travel Grant for 2021 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)”, NSF, PI: Feng Luo, \$20,000 (100%), (05/2021-04/2023).

“Selection, molecular and genetic analysis of HLB tolerant/resistant variant citrus plants”, NIFA, PI: Feng Luo, Co-PI: Yongping Duan, Fred Gmitter, Marylou Polek, Zhanao Deng, Liliana M. Cano, Olufemi Alabi, \$4,274,523 (Clemson \$977,959 (100%)), (2017.1-2023.1).

“RAPID: Cyber-Hostility and COVID-19”, NSF PI: Matthew Costello, Co-PI: Feng Luo (12.5%), Hongxin Hu, Long Cheng, Yin Yang, \$199,996, (2020.6-2022.6).

“Influenza host specific glycan motif identification through systems biology”, NIH, PI: Xiufeng Wan (University of Missouri), Co-PI: Feng Luo, \$439,556 (Clemson \$27,077 (100%)), (2020.2-2022.1).

“Deep Learning Convolutional Neural Network to aid in Subclassification and Diagnosis of Neoplastic and Inflammatory Skin Conditions Through Whole Slide Imaging”, Clemson University & Medical University of South Carolina Artificial Intelligence Pilot Project Initiative, PI: Jessica Forcucci (MUSC), Feng Luo, Co-PI: Manuel Valdebran, Jihad Obeid, James Madory, Christopher Metts, Alan Snyder, John Plante (MUSC), \$25,000 (Clemson \$17,134 (100%)), (2020.6-2021.6).

“CU FELLOWS: Enabling Industry 4.0 to *Advance* Clemson Composites Center”, Clemson University, PI: Srikanth Pilla, Co-PI: Feng Luo, Ardalan Vahidi, Gang Li, \$71,202, (2018.6-2020.5).

“Clemson Faculty SUCCEEDS: A pilot study to examine the metabolic and epigenetic responses to a novel prenatal care intervention”, Clemson University, PI: Liwei Chen, Co-PI: Feng Luo, Xiaoqian Sun, \$60,000, (2017.7-2018.6).

“Development of Spark Based Software for Kratos”, Kratos Technology and Training Solutions, PI: Feng Luo, \$65,000, (2016.1-2017.12).

“EAGER: Defending Against Visual Cyberbullying Attacks in Emerging Mobile Social Networks, NSF, PI: Hongxin Hu, Co-PI: Feng Luo (30%), Robin Kowalski, Joseph P. Mazer, \$239,678, (2015.9-2018.8).

“Understanding contributions of transcriptome and metabolome to autism risk: Identification of long noncoding RNA (lncRNA) and metabolome biomarkers and therapeutic targets for ASDs”, Self Regional Healthcare foundation, PI: Anand K. Srivastava, Co-PI: Alka Chaubbey, Tim Wood, Liangjiang Wang, Feng Luo, \$595,830 (Feng Luo \$115,744), (2014.7-2017.6)

“Screening and Cloning of Resistance Related Genes by RNA-Seq in Huanglongbing (HLB) Resistant and Susceptible Citrus Breeding Lines”, Citrus Research and Development Foundation, Inc., PI: Yongping Duan, Co-PI: Eddie Wayne Stover, Feng Luo, \$458,000 (Clemson \$336,150 (100%)), (2012.5-2015.4).

“Development of Deep Learning Methods for Systems Biology”, Philip Morris International, PI: Feng Luo, \$6,667 (100%), (2014.1-2015.6).

“Herd Behavior and Contrarian Behavior in Social Media: Sentiment Analysis of Twitter Data”, Clemson University URG, PI: Heshan Sun, Co-PI: Feng Luo, \$9,980, (2014.1-2014.6).

“Collaborative Research: G-SESAME Cloud: A Dynamically Scalable Collaboration Community for Biological Knowledge Discovery”, NSF, PI: Zijun Wang, Philip Yu; Co-PI: Feng Luo (20%), Pradip Srimani, Chinfu Chen, \$ 545,355, (2010.7-2012.6).

“Development of a Cotton Marker Database”, Cotton Incorporated, PI: Anna Blenda, Co-PI: Feng Luo, Albert Abbott, \$105,000, (2010.1-2011.12).

“Environmental Effects on the Growth or Survival of Stress-Adapted Escherichia Coli O157:H7 and Salmonella spp. in Compost”, Center for Product Safety, UC-Davis, PI: Xiuping Jiang, Co-PI: Feng Luo, Jinkyung Kim, \$222,098 (2008.12-2009.11).

“Determining the environmental factors contributing to the extended survival or regrowth of food-borne pathogens in composting systems”, Fresh Expression, PI: Xiuping Jiang, Co-PI: Feng Luo, Geoff Zehnder, \$ 212,992, (2007.6-2008.5).

## **Teaching**

### **Undergraduate courses:**

- CPSC 3600 Network and Network Programming
- CPSC 2120 Data Structure and Algorithm
- CPSC 4620 Database
- CPSC 4810 Introduction of Programming Languages in Bioinformatics
- CPSC 4820 Introduction to Artificial Intelligence

### **Graduate Courses:**

- CPSC 8450 Bioinformatics algorithm
- CPSC 8650 Data Mining
- CPSC 8620 Database Systems
- CPSC 8420 Machine Learning
- CPSC 8470 Information Retrieval
- CPSC 8430 Deep Learning

## **Students and Postdocs Advising**

### **Research Assistant Professor**

Pei Xu (2023-)

### **Postdoc**

Zhijie Li (2023-)

### **Graduate Students**

Mingqi Li (Ph.D. 2019-)

Dan Zhang (Ph.D. 2019-)

Xiaoyan Han (Ph.D. 2019-)

Melanie Lambert (Ph.D. 2020-)

Jingjing Wang (Ph.D. 2023-)

Joey Binz (M.S. 2022-)

Grayson Byrd (M.S. 2023-)

## **Students and Postdocs Advised**

### **Postdocs**

Bo Wu, (2019-2022)  
Yunsheng Wang (2012-2018)  
Zhiming Wang (2013-2015)

### **Graduate Students**

Yuehua Zhang (Ph.D. 2022)  
Fei Ding (Ph.D. 2022)  
Pengfei Xuan (Ph.D. 2016)  
Bo Li (Ph.D. 2011)  
Bradley Sanders (M.S. 2021-2022)  
Linxiong Liu (MS. 2016- 2018)  
Lu Zhang (M.S. 2013-2014)  
Guangyu Yang (M.S. 2011-2013)  
Yanyan Wang (M.S. 2011-2012)  
Aditya Sriram (M.S. 2010-2012)  
PengFei Xuan (M.S. 2009-2011)  
Subha Arulselvam (M.S., 2009)  
Manas Karekar (M.S., 2009)  
Abineshraj Rajagopal (M.S., 2009)  
Suryanarayana Anil Kumar (M.S., 2009)  
Ramu Muthuraman (M.S. 2009)  
Sonia P. Ramnani (M.S., 2008)  
Fang Wang (M.S. co-advisor with Dr. ChinFu Chen, 2008)

### **Visiting Graduate Students**

Xumeng Li (2010)

### **Undergraduate Students**

Steffen Dreesen (2020-2021)  
Martha Newton (2019-2020)  
Kevin Duan (2019)  
Nick Castro (2017)  
Wesley Knight (2017)  
Siyun Lyu (2017)  
Andrew Zhang (2016)  
Steven Nix (2016)  
Lillian Hislop (2013)

### **High School Summer Interns**

Maz Tong (2021-2023)  
Ruijia Hu (2019-2020)  
Wyatt Dorris (2019)  
Jonathan Tong (2015-2016)  
Stone Holt (2014)

Jonathan Lowe (2013)  
Alexander Duvall (2013)  
Michael Lu (2011)  
Michael Hang (2010)  
Joshua Cater (2009)

## **University Services**

### **Department Committees**

- Student Award Committee (2007-2008, 2009-2010)
- Graduate Affairs Committee (2008-2009, 2011-2014)
- Graduate Recruiting Committee (2010-2011)
- Equipment Committee (2015-2017)
- Director's Advisory Committee (2017, 2020-2022)
- Faculty Search Committee (2016-2017), 2021(Chair)
- Interim Director Search Committee Chair (2017)
- CS Division TPR Committee (2018-), Chair (2019-2020)

### **College Committee**

- College Bylaw Committee (2019)

### **University Committees**

- Clemson University Computational Advisory Team (CU-CAT) (2015-2018)
- Faculty Alternative Senator (2019-2020)
- Faculty Senator (2020-2023)

## **Professional Services:**

- **Conference Co-Chair**
  - 19<sup>th</sup> IEEE International Conference on Machine Learning and Application (ICMLA) 2020
- **Program Co-chair:**
  - 16<sup>th</sup> IEEE International Conference on Machine Learning and Application (ICMLA) 2017
  - IEEE International Conference on Bioinformatics and Biomedicine (BIBM) 2021
  - The 21<sup>st</sup> Asia Pacific Bioinformatics Conference (APBC) 2023
- **Award Co-chair:**
  - IEEE International Conference on Bioinformatics and Biomedicine (BIBM) 2008.
- **Workshop Co-chair:**
  - IEEE International Conference on Bioinformatics and Biomedicine (BIBM) 2014
  - IEEE BigData 2015
- **Poster Co-chair:**
  - IEEE BigData 2017
- **Program committee member:**
  - IEEE BigData (2017-2022)



- IEEE International Conference on Tools with Artificial Intelligence (ICTAI) (2011-2016)
- IEEE International Conference on Machine Learning and Application (ICMLA) (2007-2022)
- IEEE International Conference on Bioinformatics and Biomedicine (BIBM) (2008-2022)
- International Conference on Database and Expert Systems (DEXA) 2006.
- **Editorial:**
  - **Associate Editor**
    - BMC Bioinformatics (2019-)
    - BMC Systems Biology (2017-2019)
- **Reviewer for funding agencies:**
  - Biotechnology and Biological Sciences Research Council (UK), 2007
  - NSF, 2009, 2012, 2017, 2018, 2019, 2020, 2021, 2022
  - AFOSR, 2012

### **Honors and Awards:**

- TexTC Scholarship, the University of Texas at Dallas, 2002-2003.
- Travel Fellowship, ISMB 2005.
- First place in “Intra-Species Protein Phosphorylation Prediction” of the sbv IMPROVER Species Translation Challenge organized by IBM Research and Philip Morris International (PMI) R&D, 2014.
- Clemson University Research, Scholarship and Artistic Achievement Award, 2022.
- Best Paper Award, Autonomy, Artificial Intelligence & Robotics Technical Session, 2023 Ground Vehicle Systems Engineering Technology Symposium (GVSETS).

### **Professional Society Memberships:**

- Institute of Electrical and Electronics Engineers (IEEE), Senior member
- Association for Computing Machinery (ACM)