

## Dr. Huanmei Wu

Department of Health Services Administrator and Policy  
College of Public Health, Temple University  
Philadelphia, PA 19122  
[Huanmei.Wu@Temple.edu](mailto:Huanmei.Wu@Temple.edu)

### **EDUCATION:**

UNDERGRADUATE: Tsinghua University (Beijing China)  
B.S., Chemistry, June 1996

GRADUATE: Northeastern University (Boston, MA)  
M.S., Computer and Information Science, June 2003  
Ph.D., Computer and Information Science, June 2005

### **ACADEMIC APPOINTMENTS:**

2020-present Professor & Chair, Department of Health Services Administration and Policy  
Assistant Dean for Global Engagement  
Temple University College of Public Health, Philadelphia, PA

2020-present Adjunct Professor of Bioinformatics, Department of BioHealth Informatics  
Indiana University School of Informatics and Computing at IUPUI

2019-2020 Co-Center Director of BioHealth Informatics Research Center (BHIRC)  
Indiana University School of Informatics & Computing, IUPUI

2015-2020 Chair, Department of BioHealth Informatics  
Indiana University School of Informatics & Computing, IUPUI

2018-2020 Program Director of Biomedical Informatics,  
Indiana University School of Informatics & Computing, IUPUI

2013-2020 Program Director of Bioinformatics, Department of BioHealth Informatics,  
Indiana University School of Informatics & Computing, IUPUI

2011-2020 Associate Professor  
Purdue School of Engineering and Technology, IUPUI, Indianapolis, IN  
Indiana University School of Informatics and Computing (Joint appointment)

2006-present Adjunct Professor, Electrical and Computer Engineering  
Purdue School of Engineering and Technology, IUPUI, Indianapolis, IN

2006-present Adjunct Professor,  
School of Health Sciences, Purdue University, West Lafayette, IN

2010-present Adjunct Professor, Department of Radiation Oncology  
School of Medicine, IUPUI, Indianapolis, IN

2007-2014 Adjunct Professor, Department of Computer and Information Science  
Purdue School of Sciences, IUPUI, Indianapolis, IN

2005-2011 Assistant Professor, Computer and Information Technology  
Purdue School of Engineering and Technology, IUPUI, Indianapolis, IN  
Indiana University School of Informatics(Joint appointment)

### **PROFESSIONAL ORGANIZATIONS:**

2004-present The Special Interest Group on Management of Data (SIGMOD)

2006-present The American Association of Physicists in Medicine (AAPM)

2010-present The American Society for Engineering Education (ASEE)

2010-present The Association for Computing Machinery (ACM)

2010-present The Institute of Electrical and Electronics Engineers (IEEE)

2010-present The IEEE Engineering in Medicine and Biology Society (EMBS)

2010-present The American Society for Therapeutic Radiology and Oncology (ASTRO)

- 2016-present The American Medical Informatics Association (AMIA)  
2018-present The Healthcare Information and Management Systems Society (HIMSS)

#### **HONORS AND AWARDS:**

- 2010 Best Abraham M. Max Distinguished Professor Award for Outstanding Research  
Purdue School of Engineering and Technology, IUPUI
- 2009 The 2009 MURI Research Team Award First Runner-UP (as faculty mentor)  
The IUPUI Center for Research and Learning, IUPUI
- 2007 The 2007 Best MURI Research Team Award (as faculty mentor)  
Purdue School of Engineering and Technology, IUPUI

#### **GRANTS, FELLOWSHIPS, AND AWARDS:**

##### **External Research Grants and Contracts**

- 1) Co-I, National Institute of Health (NIH)/National Institute of Aging (NIA), U54, Indiana university Alzheimer's Drug Discovery Center (PI: Alan Palkowitz), 10/01/2019-09/30/2024.
- 2) Co-PI, National Science Foundation (NSF), CICI: SSC: Development of a Secure and Privacy-Preserving Workflow Architecture for Dynamic Data Sharing in Scientific Infrastructures (PI: Zou), 09/01/2018 – 08/31/2021.
- 3) PI, Indiana Primary Health Care Association (IPHCA), Analysis of Research and Training Opportunities for Community Health Centers, 07/15/16-05/31/2021.
- 4) Co-I, the Junior Diabetics Research Foundation (JDRF), Biomarkers of Beta Cell Stress and Death in Type 1 Diabetes, (PI: Dr. Carmella Evans-Molina), 09/01/17-08/31/2019.
- 5) Co-I, National Institute of Health, R01, Functional image and biomarker to guide precision adaptive treatment in Non-Small Cell Lung Cancer, (PI: Feng-Ming Kong), 7/1/2017-4/30/18.
- 6) PI, National Institute for Public Safety Health (NIPSH), Database Build for NIPSH, 04/01/2016 – 1/31/2017.
- 7) PI, Patient-Centered Outcomes Research Institute (PCORI), Supplement for Improving Healthcare Systems for Access to Care and Efficiency by Underserved Patients, 10/01/2015 – 12/31/2017.
- 8) PI, Patient-Centered Outcomes Research Institute (PCORI), Improving Healthcare Systems for Access to Care and Efficiency by Underserved Patients, 10/01/2013 – 12/31/2017 (PI for 07/01/2015-present; Original PI: Dr. Doebbeling).
- 9) PI, Research Contract from Varian Medical Research, 11/01/2011 – 12/31/2014, titled "Optimization of 4D Proton Treatment Planning with Interplay Effects".
- 10) PI, Research Contract from PerkinElmer Inc, 04/01/2011 – 03/31/2015, titled "Real-time 4D Respiratory Motion Tracking and Management using TiGRT IVS System for Image Guided Proton Radiotherapy".
- 11) PI, NIH R21 award from National Cancer Institute, 08/15/2008 – 07/31/2011, titled "Lung Tumor Motion Behavior Analysis Using 4DCT".
- 12) Co-PI, Pilot Project from Fred Hutchinson/University of Washington Cancer Consortium, titled "Dynamic Gated Radiotherapy for Moving Tumors in the Lungs" (PI is Dr. Sandison.)

##### **Internal Research Grants and Contracts**

- 1) Mentor, Enhanced Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER), 03/01/2010 – 02/28/2021.
- 2) PI, the Office of International Affairs (OIA) at IUPUI, the International Partnership Development Fund, Collaborating with Newcastle University on Biomedical Informatics, 08/01/2019 – 07/31/2020.
- 3) PI, The Office of the Vice President for International Affairs (OVPIA), Promoting Collaborative Informatics Research in Healthcare and Public Safety, 06/01/2017 -05/31/2018.

- 4) PI, The Biomechanics and Biomaterials Research Center (BBRC), 01/01/2013-12/31/2014, titled "Integration of Spatial and Temporal Respiratory Motion in Adaptive Proton Therapy Delivery"
- 5) PI, Multidisciplinary Undergraduate Research Institute (MURI), 09/01/2007 – 05/31/2008, Titled "Correlating Lung Tumor Motion to its Location".
- 6) PI, IUPUI Summer MURI, 06/01/2009 – 07/31/2009, Titled "Lung Tumor Treatment Accuracy Assessment using Cyber Knife Model".
- 7) PI, IUPUI Summer MURI, 06/01/2008- 07/31/2008, titled ""Patient Setup Error Assessment in IGRT".
- 8) PI, Purdue Research Foundation (PRF) International Travel Grant, 07/01/2008-06/30/2009.
- 9) PI, International Development Fund (IDF) Grant, 08/01/2007 – 07/31/2008, titled "Collaboration on Real- time Image Guided Cancer Radiation Treatment of Cancer Patients with Hokkaido University in Japan".
- 10) Co-PI, Multidisciplinary Undergraduate Research Institute (MURI), 09/01/2007 - 05/31/2008, Titled "Mobile Forensics in Health Care".
- 11) PI, Multidisciplinary Undergraduate Research Institute (MURI), 09/01/2006 – 05/31/2007, titled "Transportation Accident Data Analysis for Active Safety Measures".
- 12) PI, Multidisciplinary Undergraduate Research Institute (MURI), 01/01/2006-07/31/2006, Titled "Dynamic 3D Tumor Respiratory Motion Modeling in Image-guided Radiation Treatment".

#### TEACHING:

Course	Title
INFO I-590	Advanced Database Topics
INFO B-646	Computational Systems Biology
INFO I-590	Artificial Intelligence in Precision Health
INFO B-518	Statistical Methods for Bioinformatics
INFO B-656	Translational Bioinformatics Applications
INFO B-556	Biological Database Management
INFO B-512	Scientific and Clinical Data Management
INFO I-611	Mathematical & Logical Foundations
INFO I-601	Mathematical foundation of Informatics
INFO I-600	Professionalism and Pedagogy in Informatics
ECE 59500	Database Management Systems
TECH 58100	Applied Data Analytics
TECH 58100/INFO I590	Advanced Database Topics
TECH 58100/INFO I590	Health Information Technology
TECH 58100/INFO I590	Data Mining & Warehousing
TECH58100/CIT 49900	Database Security
CIT 21400	Introduction to Data Management
INFO I-308	Information Representation
CIT 30300	Communication Security and Network Control
CIT 49900	DB Implementation & Programming
CIT 47900	DB Implementation & Administration

#### PUBLICATIONS:

(Students and trainees marked with \*, I am either the 2<sup>nd</sup> or the last Author as the mentor)

##### **Refereed Journals**

- 1) Jiannan Liu\*, Chuanpeng Dong\*, Guanglong Jiang\*, Xiaoyu Lu\*, Yunlong Liu, **Huanmei Wu**, Transcription factor expression as a predictor of colon cancer prognosis: A machine learning

practice, accepted by BMC Medical Genomics, 2020.

- 2) Chuanpeng Dong\*, Jiannan Liu\*, Steven X. Chen, Tianhan Dong\*, Guanglong Jiang\*, Yue Wang, **Huanmei Wu**, Jill L. Reiter, Yunlong Liu, Highly robust model of transcription regulator activity predicts breast cancer overall survival, accepted by BMC Medical Genomics, 2020.
- 3) Li Li, Poling Yu, Ping Zhang, **Huanmei Wu**, Qizhen Chen, Shuangdi Li, and Yanqiu Wang. "Upregulation of hsa\_circ\_0007874 suppresses the progression of ovarian cancer by regulating the miR - 760/SOCS3 pathway." *Cancer Medicine* (2020).
- 4) Weijun Zhu, Yingjie Han, **Huanmei Wu**, Yang Liu, Xiaofei Nan and Qinglei Zhou, Predicting the Results of Molecular Specific Hybridization using Boosted Tree Algorithm, *Journal of Concurrency and Computation: Practice and Experience*, 32, no. 1, e4982, pp. 1-12, 2020.
- 5) Hua Jiang, Abdulaouf Ramadan, Becquet Laurine, Tu Szu-Wei, Hong Liu, Courtney Rowan, Xiaowen Liu, **Huanmei Wu**, Jun Wan, and Sophie Paczesny. "IL-33 Therapy Prevents Acute Lung Injury after Transplantation Via IL-9-Producing Type 2 Innate Lymphoid Cells Induction." *Blood*, Volume 134 (Supplement\_1): 583, November 13, 2019.
- 6) Patrick TS Lai, Jeffrey Wilson, **Huanmei Wu**, Josette Jones, and Brian E. Dixon. "Measuring and Visualizing Chlamydia and Gonorrhea Inequality: An Informatics Approach Using Geographical Information Systems." *Online Journal of Public Health Informatics* 11, no. 2 (2019).
- 7) Weijun Zhu, **Huanmei Wu**, Miaolei Deng, "LTL Model Checking Based on Binary Classification of Machine Learning," *IEEE Access*. Vol. 7, Issue 1, pages 135703-135719, 2019, doi: 10.1109/ACCESS.2019.2942762
- 8) Weijun Zhu, Xiaokai Liu, Mingliang Xu, and **Huanmei Wu**, Predicting the results of RNA molecular specific hybridization using machine learning, *IEEE/CAA Journal of Automatica Sinica*, Volume 6, Issue 6, pp. 1384-1396, 2019.
- 9) Miaolei Deng, Huanmei Cao, Weijun Zhu, **Huanmei Wu**, and Yangyue Zhou, Benchmark Tests For The Model-Checking-Based IDS Algorithms, in *IEEE Access*. doi: 10.1109/ACCESS.2019.2939011.
- 10) Hao Yu\*, **Huanmei Wu**, Weili Wang, Shruti Jolly, Jian-Yue Jin, Chen Hu and Feng-Ming (Spring) Kong, Machine Learning to Build and Validate a Model for Radiation Pneumonitis Prediction in Patients with Non-Small-Cell Lung Cancer, *Clinical Cancer Research*, DOI: 10.1158/1078-0432.CCR-18-1084, April 16, 2019.
- 11) Xiaowen Liu, Zongliang Yue, Yimou Cao, Lauren Taylor, Qing Zhang, Sung W. Choi, Samir Hanash, Sawa Ito, Jake Y. Chen\*, **Huanmei Wu\***, and Sophie Paczesny, A GVHD-free Antitumoral Signature Following Allogeneic Donor Lymphocyte Injection Identified by Proteomics and Systems Biology, *JCO Precision Oncology*, DOI: 10.1200/PO.18.00365, published online May 23, 2019.
- 12) Bobak Kechavarzi\*, **Huanmei Wu**, Thompson N Doman, Bottom-up, integrated -omics analysis identifies broadly dosage-sensitive genes in breast cancer samples from TCGA, *PLoS ONE* 14(1): 1-12, 2019.
- 13) Yuichi Akino\*, **Huanmei Wu**, Ryoong-Jin Oh, Indra J. Das, An effective method to reduce the interplay effects between respiratory motion and a uniform scanning proton beam irradiation for liver tumors: a case study, *J Appl Clin Med Phys*. 20(1):220–228. doi:10.1002/acm2.12508, 2019
- 14) Masoud Hosseini\*, Anthony Faiola, Josette Jones, Daniel Vreeman, **Huanmei Wu**, Brian E. Dixon, - Impact of Document Consolidation on Healthcare Providers' Perceived Workload and Information Reconciliation Tasks: A Mixed Methods Study, *Journal of the American Medical Informatics Association*, 26(2), 134-142, 2019.
- 15) Jiannan Liu\*, Jing Xu\*, **Huanmei Wu**, A patient-oriented clinical decision support system for CRC risk assessment and preventative care, *BMC Medical Informatics and Decision Making*, Vol 18, Suppl 5, pp. 45 – 53, 2018.
- 16) Iman Mohanmmad\*, **Huanmei Wu**, Ayten Turkcan, Tammy Toscos, Bradley N. Doebbeling, Data Analytics and Modeling for Appointment No-show in Community Health Centers, the *Journal of Primary Care and Community Health*, Volume 9, pp. 1- 11, 2018.

- 17) Kislaya Kunjan\*, **Huanmei Wu**, Tammy R Toscos, Bradley N Doebbeling, Large Scale Data Mining to Optimize Patient-Centered Scheduling at Health Centers, *Journal of Healthcare Informatics Research*, pp 1-18, 2018.
- 18) Weili Wang, Lei Huang, Jian-Yue Jin, Shruti Jolly, Yong Zang, **Huanmei Wu**, Li Yan, Wenhui Pi, Lang Li, Andrew L. Mellor, Feng-Ming Kong, IDO Immune Status Post-chemoradiation May Predict Survival in Lung Cancer Patients: Combined Analysis of Prospective Multicenter Trials, *Cancer Research*, 78(3): 809-816. 2018,
- 19) WeiJun Zhu, ChangWei Feng, and **Huanmei Wu**. "Model Checking Temporal Logic formulas using Sticker Automata." *Journal of BioMed Research International*, 2017; 2017:7941845. doi: 10.1155/2017/7941845. Epub Sep 28, 2017.
- 20) Songan Mao\*, **Huanmei Wu**, Minghui Lu, Chee-Wai Cheng, "Multiple 3D Marker Localization and Tracking System in Image-guided Radiotherapy", *International Journal of Robotics and Automation*, Vol. 32, No. 5, 2017.
- 21) Songan Mao\*, **Huanmei Wu**, George Sandison, Shiao-fen Fang, "Iterative volume morphing and learning for mobile tumor based on 4DCT", *Physics in Medicine and Biology*, volume 62, number 4, pages 1501-1517, 2017.
- 22) Masoud Hosseini\*, Josette Jones, Anthony Faiola, Daniel J. Vreeman, **Huanmei Wu**, and Brian E. Dixon. "Reconciling Disparate Information in Continuity of Care Documents: Piloting a System to Consolidate Structured Clinical Documents." *Journal of Biomedical Informatics*, 74C, pp. 123-129, 2017.
- 23) Wang, Weili, Lei Huang, and **Huanmei Wu**. "PS01. 48: Radiation Induced Changes of Indoleamine 2, 3-dioxygenase Activities Predict Overall Survival in Patients with Non-Small Cell Lung Cancer." *Journal of Thoracic Oncology* 11.11 (2016): S299.
- 24) Li Yan, Hong Zhang, Maurice King, **Huanmei Wu**, Colin Huang, Wenhui Pi, Yonglin Pu, and Mark Tan. "PS01. 47: PET Volumetric Prognostic Index may be the Most Significant Survival Factor in Non-Small Cell Lung Cancer Treated with Chemoradiation." *Journal of Thoracic Oncology* 11, no. 11 (2016): S298-S299.
- 25) Junqing Wu\*, **Huanmei Wu**, Chee-Wai Cheng, Intensity Modulated Proton Therapy as a Boost Treatment after Prostate Seed Implant: A Treatment Planning Study, *International Journal of Medical Physics, Clinical Engineering and Radiation Oncology*, Vol.04 No.01, Pages 76-83, 2015.
- 26) Benjamin Fahimian, Junqing Wu\*, **Huanmei Wu**, Xing Lei, Dual Gated Volumetric Modulated Arc Therapy, *Journal of Radiation Oncology* 9:209-216, doi:10.1186/1748-717X-9-209, 2014.
- 27) **Huanmei Wu**, Abigail Besemer\*, Minghui Lu, Dynamic Correlation of Synchronized Internal Tumor and External Skin Respiratory Motion for Image Guided Lung Cancer Radiation Treatment, *International Journal of Computer Applications (IJCA)*, Vol. 21, No. 1, pages 14-23, March 2014.
- 28) Yuichi Akino, Indra .J. Das, **Huanmei Wu**, R. Oh, T. Inoue, Respiratory Motion Management of Liver Cancer in Uniform Scanning Proton Beam Therapy, *International journal of radiation oncology, biology, physics* 09/2014; 90(1):S915-S916. 2014.
- 29) Eric Pepin, **Huanmei Wu**, Hiroki Shirato, Use of dMLC for implementation of dynamic respiratory-gated radiation therapy, *Med. Phys.* 40, 101708:1-5 (2013);
- 30) **Huanmei Wu**, Qingya Zhao\*, Minsong Cao, Indra Das, A line profile based fusion method with double partial CT imaging of oversized patients with small bore CT scanners used in radiation treatment, *Journal of Applied Clinical Medical Physics*, Vol 13, Number 2, Pages 20-31, 2012.
- 31) Qingya Zhao\*, **Huanmei Wu**, Chee-Wai Cheng, Indra Das, Dose monitoring and output correction for the effects of scanning field changes with uniform scanning proton beam, *Medical Physics*, 38, 4654-4661, 2011.
- 32) Eric Pepin\*, **Huanmei Wu**, Yuenian Zhang, Bryce Lord, Correlation and prediction uncertainties in the cyberknife synchrony respiratory tracking system, *Medical Physics*, 38, 4036-4044, 2011.
- 33) Eric Pepin\*, **Huanmei Wu**, Hiroki Shirato, Dynamic gating window for compensation of

- baseline shift in respiratory gated radiation therapy, *Medical Physics*, 38, 1912-1918, 2011.
- 34) Poonam Verma\*, **Huanmei Wu**, Mark Langer, and Indra Das, Survey: Real-time tumor motion prediction for Image Guided Radiation Treatment, *Computing in Science and Engineering*, vol 13, No 5, pages 24-35, 2011.
  - 35) Alan Kalet, George Sandison, **Huanmei Wu**, Ruth Schmitz, A state-based probabilistic model for tumor respiratory motion prediction, *Phys. Med. Biol.* 55, 7615, 2010.
  - 36) Eric Pepin\*, **Huanmei Wu**, George Sandison, Mark Langer, Hiroki Shirato, Site-specific volumetric analysis of lung tumor motion, *Phys. Med. Biol.*, 3325-3337, 2010.
  - 37) Qingya Zhao\*, **Huanmei Wu**, Mark Wolanski, Daniel Pack, Peter A. S. Johnstone, Indra J. Das, A sector-integration method for dose/MU calculation in a uniform scanning proton beam, *Phys. Med. Biol.* 55, N87–N95, 2010.
  - 38) Poonam Verma\*, **Huanmei Wu**, Mark Langer, Eric Pepin, and Indra Das, A Real-time Pattern Preserving Online Algorithm for Unrecoverable Error Removal from Lung Motion Signal, *International Journal of Radiation Oncology• Biology• Physics*, 75(3) S662.
  - 39) **Huanmei Wu**, Qingya Zhao\*, Ross Berbeco, Seco Nishioka, Hiroki Shirato, S B Jiang, Gating based on internal/external signals with dynamic correlation updates, *Physics in Medicine & Biology*. 53, 7137–7150, 2008
  - 40) **Huanmei Wu**, Mark Langer, Dogan Demir, Edward M Shmukler, Qingya Zhao, Nhung Gammon, Hiroki Shirato, Hysteresis analysis of lung tumor motion in radiation treatment, *International Journal of Radiation Oncology• Biology• Physics* 72 (1), S443-S444, 2008.
  - 41) **Huanmei Wu**, Gregory Sharp, Qingya Zhao\*, Hiroki Shirato and Steve Jiang, Statistical analysis and correlation discovery of tumor respiratory motion, *Phys. Med. Biol.* 52. 4761-4774, 2007.
  - 42) **Huanmei Wu**, George Sandison, Li Zhao\*, Qingya Zhao\*, Hiroki Shirato and Steve Jiang, Correlation between parameters describing tumor motion and its location in the lungs, *Australas. Phys. Eng. Sci. Med. Vol. 30, No 4*, 2007, 341-344, 2007.
  - 43) Li Zhao\*, George Sandison, Jonathan Farr, Wen Hsi, **Huanmei Wu**, and X Li, Patient-specific margins for proton therapy of lung., *Australas. Phys. Eng. Sci. Med. Vol. 30, No 4*, 2007, 344-348, 2007.
  - 44) **Huanmei Wu**, Gregory Sharp, Betty Salzberg, David Kaeli, Hiroki Shirato, Steve B Jiang, Model-Based Probabilistic Prediction of Tumor Respiratory Motion, *Medical Physics* 32 (6Part2), 1894-1894, 2005.
  - 45) **Huanmei Wu**, Gregory C Sharp, Betty Salzberg, H Shirato, D Kaeli, SB Jiang, A Hidden Markov Model for Tumor Motion Analysis, *Medical Physics*, 31(6), 1780, 2004
  - 46) **Huanmei Wu**, Gregory C Sharp, Betty Salzberg, David Kaeli, Hiroki Shirato and Steve B Jiang, A Finite State Model for Respiratory Motion Analysis in Image Guided Radiation Therapy, *Physics in Medicine and Biology (PMB)*, 49(23): 5357-5372, 2004.
  - 47) **Huanmei Wu**, Becky Norum, Judith Newmark, Betty Salzberg, Carol M. Warner, Charles Dimarzio and David Kaeli, A Database System to Advance Subsurface Sensing and Imaging, *Subsurface Sensing Technologies and Applications, an International Journal*, 4(4): 395-408, 2003.

#### Refereed Conference Publications

- 1) **Huanmei Wu**, Community Partnerships for Enhanced Research Experience in Biomedical Informatics, accepted as full paper for the 2020 Frontiers in Education (FIE) conference.
- 2) **Huanmei Wu**, Parth Kothiya\*, Aamir Khan\* and Jiannan Liu\*, Family-HealthVault: A Group Caring and PHI Sharing Framework among Family Members, Accepted to the Seventh IEEE International Conference on Healthcare Informatics (ICHI 2019).
- 3) Jiannan Liu\*, Chuanpeng Dong\*, Guanglong Jiang\*, Xiaoyu Lu\*, Yunlong Liu and **Huanmei Wu**, Transcription factor expression as a predictor of colon cancer prognosis: A machine learning practice, accepted by the International Conference on Intelligent Biology and Medicine (ICIBM 2019).

- 4) Chuanpeng Dong\*, Jiannan Liu\*, Steven X. Chen, Tianhan Dong\*, Guanglong Jiang\*, Yue Wang, **Huanmei Wu**, Jill L. Reiter and Yunlong Liu, Highly robust model of transcription regulator activity predicts breast cancer overall survival, accepted by the International Conference on Intelligent Biology and Medicine (ICIBM 2019).
- 5) Jiannan Liu, Jing Xu, **Huanmei Wu**, A patient-oriented clinical decision support system for CRC risk assessment and preventative care, Sino-US Conference on Health Informatics, 2018.(Best Paper Award).
- 6) Aamir Khan, Jiannan Liu, **Huanmei Wu**, A Family-sharing Personal Health Record System - MyHealthVault, Sino-US Conference on Health Informatics, 2018.(Best Paper Award).
- 7) **Huanmei Wu**, Hao Yu, Tammy Toscos, Amy Miller, Brad Doebbeling, Shaping Future Patient-centered Healthcare Research through a Modified Delphi Process, in the proceeding of The 4th International Conference on Health Informatics and Medical Systems, pp. 16-22, 2018.
- 8) **Huanmei Wu**, Ashish Ambavane\*, Sunanda Mukherjee\*, Songan Mao\*, A Coherent Healthcare System with RDBMS, NoSQL and GIS Databases, Proceedings of the 32nd International Conference on Computers and Their Applications, CATA 2017. The International Society for Computers and Their Applications (ISCA), p. 313-318, 2017.
- 9) **Huanmei Wu**, Jian Zhang, Sunanda Mukherjee\*, Miaolei Deng, A Workflow-driven Web Inventory Management System for Reprocessing Businesses, the 2017 Knowledge Management in Organizations (KMO). Communications in Computer and Information Science, vol 731. Springer, DOI: 10.1007/978-3-319-62698-7\_27, 2017.
- 10) **Huanmei Wu**, Priyanka Priyanka\*, Systematic Study of Big Data Science and Analytics Programs, Paper presented at 2017 ASEE Annual Conference & Exposition, Columbus, Ohio. <https://peer.asee.org/28900>.
- 11) Jian Zhang, **Huanmei Wu**, Page File-Oriented Web Application Design, in the proceedings of 2016 8th International Conference on IT in Medicine and Education (ITME 2016), 1-6.
- 12) **Huanmei Wu**, Oindrila Raha\*, Jian Zhang, Customizing bioinformatics graduate programs for diversified student backgrounds. IEEE Frontiers in Education Conference, p. 1-7, 2016.
- 13) Sunanda Mukherjee\*, **Huanmei Wu**, Josette Jones, Healthcare Data Analytics for Parkinson's Disease Patients: A Study of Hospital Cost and Utilization in the United States, AMIA Annual Symposium Proceedings. 2017 Feb 10; 2016:1950-1958. eCollection 2016.
- 14) Josette F. Jones, **Huanmei Wu**, Jay S. Patel\*, Suranga Nath Kasthurirathne\*, Sunanda Mukherjee\*: An Evaluation of Activity Trackers for Monitoring Parkinson's Disease Patient Outcomes. AMIA Annual Symposium Proceedings. Vol. 2016. American Medical Informatics Association, 2016.
- 15) Iman Mohammadi\*, Seyedsasan Hashemikhabir\*, Tammy Toscos and **Huanmei Wu**, Health Care Needs of Underserved Populations in the City of Indianapolis, in the proceeding of the 7th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM BCB), pages 512-513, 2016.
- 16) Iman Mohammadi\*, Ayten Turkcan, Tammy Toscos, **Huanmei Wu**, Bradley N. Doebbeling: Predictive Modeling for Appointment No-show in Community Health Centers. AMIA Annual Symposium Proceedings. Vol. 2016. American Medical Informatics Association, 2016.
- 17) Jian Zhang, Wang Mei and **Huanmei Wu**, Discussion of RAMCloud Storage Based on NUMA Architecture, 29th International Conference on Computer Applications in Industry and Engineering (CAINE 2016), pp.233-238, Denver, USA, September 26-28, 2016.
- 18) Jian Zhang, Wang Mei and **Huanmei Wu**, NUMA Memory Arrangement by Using BW-SA, 29th International Conference on Computer Applications in Industry and Engineering (CAINE 2016), pp.239-244, Denver, USA, September 26-28,2016.
- 19) Songan Mao\*, **Huanmei Wu**, Minghui Lu, Chee-Wai Cheng (2016). Real-time 3D tumor tracking based on 2D projections of implanted markers. In Proceedings of the 31st International Conference on Computers and Their Applications, CATA 2016. (pp. 177-182). The International Society for Computers and Their Applications (ISCA 2016).
- 20) **Huanmei Wu**, Amrith Palani\*, Bioinformatics Curriculum Development and Skill Sets for Bioinformaticians, in the proceeding of the IEEE Frontiers in Education 2015, pages 1-7.

- 21) **Huanmei Wu**, Qingya Zhao, Minghui Lu, Indra J Das, Huaang Chen, Chee-Wai Cheng, Subsequence Based Treatment Failure Detection and Intervention in Image Guided Radiotherapy, in the proceeding of the 2013 IEEE/ACIS 12th International Conference on Computer and Information Science (ICIS), 195-200, 2013.
- 22) Abigail Besemer, **Huanmei Wu**, Minghui Lu, Dynamic Adaptive Correlation over Synchronous Streaming Time Series, in the proceeding of 26th International Conference on Computers and Their Applications in Industry and Engineering (CAINE), 91-96, 2013.
- 23) Qingya Zhao, **Huanmei Wu**, Indra Das, Quality Assurance of Compensator for Proton Therapy, in the proceeding of the International Federation for Medical and Biological Engineering (IFMBE) for the World Congress on Medical Physics and Biomedical Engineering 2012.
- 24) Rong Yan\*, Chengxue Dang, **Huanmei Wu**, ChiCanBank: A Chinese Cancer Tissue Bank Management System, in the proceeding of 25th International Conference on Computers and Their Applications in Industry and Engineering (CAINE-2012), p. 127-132, Nov 2012.
- 25) **Huanmei Wu**, Srivani Malipeddi\*, Influential factors for severe traffic crashes, 2011 IEEE International Conference on Vehicular Electronics and Safety (ICVES), page(s): 71-75, 2011.
- 26) **Huanmei Wu**, Adam Jones\*, Ekta Agrawal\*, Medical Error Detection based on Insurance Claims, In the proceeding of HEALTHINF conference 2011, pages 604-607, 2011.
- 27) **Huanmei Wu**, Project Based Multidisciplinary Education for Undergraduates, in the proceeding of 117<sup>th</sup> Annual Conference of American Society for Engineering Education (ASEE), AC 2010-2151, 2010.
- 28) Qingya Zhao\* and **Huanmei Wu**, Quality Assurance of Internal/External Tumor Motion, in the processing of the 3rd International Conference on Bioinformatics and Biomedical Engineering, 832-836, 2009
- 29) Connie Justice, **Huanmei Wu** and Evelyn Walton\*, Mobile Forensics in Healthcare, in the proceeding of 2009 Eighth International Conference on Mobile Business (ICMB), 255-260, 2009.
- 30) **Huanmei Wu**, Qingya Zhao\*, Li Zhao\*, Knowledge Discovery from Tumor Respiratory Motion Data, in the proceeding of 2008 International Conference on BioMedical Engineering and Informatics pp. 297-301, 2008.
- 31) Li Zhao\*, George Sandison, Jonathan Farr, **Huanmei Wu**, Markus Fitzek, The moving target induced dosimetric effect vs. beam direction in proton radiotherapy of moving lung tumors, in the proceeding of 2008 International Conference on BioMedical Engineering and Informatics. 804-808., 2008
- 32) **Huanmei Wu**, Qingya Zhao\*, Ross Berbeco, Seco Nishioka, Hiroki Shirato and Steve Jiang, Correlation identification between internal/external motion signals, Medical Imaging: Physics of Medical Imaging. Proceedings of the SPIE, Progress in biomedical optics and imaging, 9(30), Volume 6913, pp. 69131P1-69131P10, 2008.
- 33) **Huanmei Wu**, Soft Skills Development in a Diversified Small Class, in the proceeding of the 2007 International Conference on Frontiers in Education: Computer Science and Computer Engineering (FECS), 2007, page 281-284.
- 34) Harikrishna Rajabather\* and **Huanmei Wu**, Dynamic Tumor Motion Simulation Algorithm, in Proceedings of the 2007 American Society for Engineering Education (ASEE) IL/IN conference, 51-55, 2007.
- 35) Mary McLaughlin\*, **Huanmei Wu**, and Malika Mahoui, Analysis and Correlation of Internal Tumor and External Marker Motion for IGRT, in Proceedings of the 2007 American Society for Engineering Education (ASEE) IL/IN conference, 79-84, 2007.
- 36) **Huanmei Wu**, Betty Salzberg, Gregory C Sharp, Steve B Jiang, Hiroki Shirato and David Kaeli, Subsequence Matching on Structured Time Series Data, in the proceeding of Special Interest Group on Management of Data (SIGMOD), 682-693, 2005.
- 37) **Huanmei Wu**, Betty Salzberg and Donghui Zhang, Online Event-driven Subsequence Matching over Financial Data Streams, In the proceeding of Special Interest Group on Management of Data (SIGMOD), 23-34, 2004.



- 38) **Huanmei Wu**, Becky Norum, Judith Newmark, Betty Salzberg, Carol M. Warner, Charles Dimarzio and David Kaeli, The CenSSIS Image Database, In the proceeding of 15th International Conference on Scientific and Statistical Database Management (SSDBM), 117-126, 2003.
- 39) Gene Cooperman, Ning Ke, **Huanmei Wu**, Marshalgen, a Package for Semi-automatic Marshaling of Objects, International Conference on Internet Computing, 555-560, 2003.

**Sample Invited Professional Presentations:** (*selected activities in the last two years*)

- Invited seminar presentations on *Biomarker Discovery in Personalized Healthcare* at the Center for Computational Biology and Bioinformatics (CCBB), Indiana University, February 2020.
- Invited to organize and present a panel on *innovations in medical data/health informatics* at the 4th Annual Innovation Conference, Indiana University, September 2019.
- Invited presentation on *Medical Informatics at Indiana University* at the 2019 Bioinformatics and Data Science Retreat, September 2019.
- Invited seminar presentation on *Artificial Intelligent in Biomedical Informatics* at the Mathematics Colloquium, Purdue School of Sciences, Indianapolis, September 2019.
- Invited presentation on *rewarding computer science education with integrated research, international service, and experiential learning* at the China Computer Education annual convocation, July 2019.
- Invited Presentation on *Bioinformatics in precision radiotherapy* at the international Oncology Symposium on advanced in immune-oncology, radiation oncology and clinical trials. June 2019.
- Presentation on *the Community and Industrial Partnerships for Improved Faculty Research & Student Experience in Biomedical Informatics* at the iSchool Partnerships and Practices program at iConference, April 2019.
- Invited Presentation on *Workflow-driven Analytics and Visualization of Heterogeneous Biomedical Data* at the 1<sup>st</sup> IUPUI Data Science Summit, February 2019.
- Invited Presentation on *Heterogeneous Biomedical Information Visualization* at the 16th Annual MidSouth Conference on Computational Biology and Bioinformatics (MCBIOS), March 2019.
- Invited talk on *Integrated Biomedical Information Management, Analysis, Modeling and Application* at the Radiotherapy Conference, Beijing, December 2018
- Invited Presentation on *advancing biomarker discovery with integrated omics data modeling and visualization* at the CTSI Disease and Therapeutic Response Modeling and Simulation November 2018.
- Invited Presentation on *Integrative multi-omics Data Analysis, Modeling, and Visualization* at HeNan University of Technology College of Informatics and Computing, June 2018
- Invited Talk on *The Emerging Fields of Biomedical Informatics (BMI)* at the Indiana University Minority Serving Institute Lightning talk Series, October 2018
- Invited Presentation on *heterogeneous data management and predictive modeling in precision medicine* at the Chinese Computer Forum (CCF) Young Computer Scientists and Engineering Forum, April 2018
- Invited Talk on *Big Data Analytics in Biomedical Informatics and Personalized Healthcare* at the Biostatistics Seminar in the School of Public Health, March 2018.

## **Professional Service:**

### *Program Committee and Conference reviewer*

- Program committee of AI 2020 (The 1st ACIS International Conference of Artificial Intelligence)
- Program committee of BCD 2020 (The 5th IEEE/ACIS International Conference on Big Data, Cloud Computing, and Data Science).
- Program committee of CSII 2020 (The 7th International Conference on Computational Science/ Intelligence & Applied Informatics)
- Program committee of HIBIBI 2015 (The 2015 International Symposium on Network Enabled Health Informatics, Biomedicine and Bioinformatics)
- Program committee of HI-BI-BI 2014
- Reviewer of the GHC (Grace Hopper Celebration) Conference Scholarship 2013
- Reviewer for the 2012 IEEE Electro/Information Technology Conference, 2012
- Program committee member of the International Conference on Computer and Information Science (ICIS 2011, 2012, 2013, 2014, 2015, 2017, 2018)
- Program committee member of 2011 IEEE International Conference on Vehicular Electronics and Safety (ICVES 2011)
- Program committee member of 2010 IEEE International Conference on Vehicular Electronics and Safety (ICVES 2010)
- Program Committee member of the 2009 IEEE International Conference on Networking, Architecture, and Storage (NAS 2009)
- Program Committee member of the 2009 Biological Knowledge Discovery from Databases (BIOKDD'09)
- International Conference on Mobile Business (ICMB 2009)
- The 3rd International Conference on Bioinformatics and Biomedical Engineering (iCBBE 2009)
- The 6th International Conference on Computing, Communications and Control Technologies (CCCT 2008)
- The 2007 World Congress in Computer Science, Computer Engineering, and Applied Computing (WORLDCOMP'07)

### *Grant/Scholarship Peer Review*

- Panel Reviewer, Smart Connect Health (SCH) Data Analytics Panel, National Science Foundation (NSF), 2020
- Panel Reviewer, the Information & Intelligent Systems Division (IIS) Small Project Panel, National Science Foundation (NSF), 2020
- Omnibus panel reviewer for the National Institutes of Health (NIH), 2015, 2017
- Omnibus panel reviewer for the National Cancer Institute (NCI/NIH), 2014
- Panel reviewer of the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP), 2011, 2012, 2013
- Panel reviewer of the National Science Foundation (NSF) Graduate Research Fellowship Program (GRFP)
- Reviewer of the GHC (Grace Hopper Celebration) Conference Scholarship 2010
- Reviewer of the GHC (Grace Hopper Celebration) Conference Scholarship 2009

### *Journal reviewer*

- International Journal of Radiation Oncology\*Biography\*Physics (Elsevier)

- Computational and Mathematical Methods in Medicine.
- New Journal of Physics
- Journal of Radiotherapy and Oncology (Elsevier)
- ACM Transactions on Database Systems (TODS)
- Internal Journal of Physics in Medicine and Biology (PMB)
- Journal of Medical Physics
- Journal of Radiation Research
- Internal Journal of Physics in Medicine and Biology,
- Journal of Cancer Therapy
- Journal of Radiation Research
- International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems

*Organization work for*

- Organization Committee for the IUPUI Artificial Intelligence (AI) Summit, 2020
- Workshop chair for the MCBIOS 2019
- Organization Committee for the 1<sup>st</sup> IUPUI Data Science Summit, 2019
- Organization Committee for the 2019 Indiana University Innovation Conference, 2019
  - In addition to the general organization committee, I am also a member of the sub-committee for the poster session, and the in charge of the expert panel of translational health innovation.
- Organization Committee for the IUPUI Data Science Initiative 2018-present
- Organization a panel on medical data and health informatics at the 2019 Indiana University Innovation Conference, 2019
- Planning Committee member for the 2012 IEEE Electro/Information Technology Conference, 2012
- Organization work for VLDB (Very Large Database) PhD Workshop 2005
- Organization work for the International Conference on Data Engineering (ICDE 2004)
- Organization work for the 15th International Conference on Scientific and Statistical Database Management (SSDBM 2003)



July 6<sup>th</sup>, 2020