HONGHUI XU

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Department of Computer Science, Georgia State University, Atlanta, GA 30302

EDUCATION BACKGROUND

Georgia State University, Altanta, GA **September 2019 - Present**

- **Major:** Computer Science
- **Degree:** Doctor of Philosophy
- **GPA:** 3.90/4.00
- **Supervisor:** Dr. Zhipeng Cai

University of Electronic Science and Technology of China, Chengdu, Sichuan **September 2015 - June 2019**

- **Major:** Computer Science
- **Degree:** Bachelor of Engineering
- **GPA:** 3.90/4.00

RESEARCH INTERESTS

- **Fundamental Theory of Machine Learning:** Robustness of Machine Learning, Supervised Learning, Unsupervised Learning, and Probably Approximately Correct Learning Framework, Transfer Learning, Collaborative Learning, Federated Learning.
- **Applications of Deep Learning:** Computer Vision, Generative Adversarial Networks, Variational Autoencoders, Generative Adversarial Networks Based Image/Video Generation, Variational Autoencoder Based Image/Video Restoration.
- **Privacy-Preserving Machine Learning:** Differentially Private Machine Learning, Adversarial Training Based Privacy Preservation Models.

TEACHING EXPERIENCES

Lab Instructor, Georgia State University **September 2020 - Present**

- **CSc 1301:** Principle Of Programming For Data Science I
- **CSc 1302:** Principle Of Programming For Data Science II

PUBLICATIONS

Journal Publications:

1. **H. Xu**, Z. Cai, D. Takabi and W. Li, Audio-visual autoencoding for privacy-preserving video streaming[J]. *IEEE Internet of Things Journal (IoTJ)*, 2021, 9(3): 1749-1761. (Impact Factor: 9.936) `https://ieeexplore.ieee.org/iel7/6488907/6702522/09453730.pdf`
2. **H. Xu**, Z. Cai and W. Li, Privacy-Preserving Mechanisms for Multi-Label Image Recognition[J]. *ACM Transactions on Knowledge Discovery from Data (TKDD)*, 2022, 16(4): 1-21. (Impact Factor: 4.54) Link: `https://dl.acm.org/doi/pdf/10.1145/3491231`
3. **H. Xu**, Z. Cai, R. Li and W. Li, Efficient CityCam-to-Edge Cooperative Learning for Vehicle Counting in ITS[J]. *IEEE Transaction on Intelligent Transporation Systems (TITS)*, 2022. (Early Access) (Impact Factor: 2.534) Link: `https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9713742`
4. Z. Xiong, **H. Xu**, W. Li and Z. Cai, Multi-source adversarial sample attack on autonomous vehicles[J]. *IEEE Transactions on Vehicular Technology (TVT)*, 2021, 70(3): 2822-2835. (Impact Factor: 5.978) Link: `https://ieeexplore.ieee.org/iel7/25/4356907/09360457.pdf`

5. Z. Cai, Z. Xiong, **H. Xu**, P. Wang, W. Li and Y. Pan, Generative adversarial networks: A survey toward private and secure applications[J]. *ACM Computing Surveys (CSUR)*, 2021, 54(6): 1-38. (Impact Factor: 10.282) Link: `https://dl.acm.org/doi/pdf/10.1145/3459992`
6. S. De, **H. Xu**, M. Bermudez-Edo, Z. Cai, Deep Generative Models in the Industrial Internet of Things: A Survey[J]. *IEEE Transaction on Industrial Informatics (TII)*, 2022. (Accept) (Impact Factor: 10.215)

Conference Publications:

1. **H. Xu**, Z. Cai and W. Li, Which Option Is a Better Way to Improve Transfer Learning Performance?[C]. *International Conference on Combinatorial Optimization and Applications (COCOA)*, Springer, Cham, 2021: 61-74. Link: `https://link.springer.com/chapter/10.1007/978-3-030-92681-6_6`

REVIEW EXPERIENCES

Participating the reviews of the following **Journals:**

- IEEE Transaction on Industrial Informatics (TII) (Impact Factor: 10.215)
- IEEE Internet of Things Journal (IoTJ) (Impact Factor: 9.936)
- IEEE Transactions on Wireless Communication (TWC) (Impact Factor: 7.016)
- Neurocomputing (Impact Factor: 5.719)
- IEEE Access (Impact Factor: 3.367)
- IEEE Networking Letters

Participating the reviews of the following **Conferences:**

- 2021 IEEE Global Communcations Conference (GLOBECOM)

(/StudentSelfService/)

Xu, Honghui

Student Academic Transcript

Academic Transcript

Payment of your student account balance is the last step in the enrollment process. Please follow these steps to resolve your balance:

- If you haven't done so already, apply for financial aid. (http://sfs.gsu.edu/the-financial-aid-process/applying-for-aid/)
- Confirm that all requirements for your financial aid have been completed. (https://student.gosolar.gsu.edu/StudentSelfService/ssb/financialAid#!/dashboard/home/)
- Review your account balance in PantherPay. (https://themes.gosolar.gsu.edu/BannerExtensibility/customPage/page/pantherPay/)
- Pay your account balance before the payment deadline. (http://registrar.gsu.edu/registration/semester-calendars-exam-schedules/)

You must have an approved payment method in place by the payment deadline. Visit our website for information about approved payment methods: http://sfs.gsu.edu/tuition-fees/payments/ (http://sfs.gsu.edu/tuition-fees/payments/)

Transcript Level

Graduate Semester

Transcript Type

Personal Copy (unofficial)

Student Information **Institution Credit** Transcript Totals Course(s) in Progress

This is not an official transcript. Courses which are in progress may also be included on this transcript.

Student Information

Birth Date

جمادي الأولى 25, 1419

Student Type

Continuing or Returning

Curriculum Information

Current Program :

Program

PHD COMPUTER SCIENCE

Major and Department

Computer Science, Computer Science

Institution Credit

Term : Fall Semester 2019

College

College of Arts & Sciences

Student Type

New Graduate

Academic Standing

Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	6222	GS	CYBER SECURITY	A+	4.000	17.20		
CSC	6223	GS	PRIVACY	A	4.000	16.00		
CSC	8320	GS	ADVANCED OPERATING SYSTEMS	A-	4.000	14.80		
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	7.000	0.00		
CSC	9900	GS	SEMINAR IN COMPUTER SCIENCE	S	1.000	0.00		
ESL	7250	GS	ACAD LISTEN/SPEAK FOR GRAD	S	3.000	0.00		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA

Current Term	23.000	23.000	23.000	12.000	48.00	4.00
Cumulative	23.000	23.000	23.000	12.000	48.00	4.00

Term : Spring Semester 2020

College
College of Arts & Sciences

Student Type
Continuing or Returning

Academic Standing
Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8224	GS	CRYPTOGRAPHY	A	4.000	16.00		
CSC	8260	GS	ADV IMAGE PROCESSING	A	4.000	16.00		
CSC	8840	GS	M & S THEORY AND APPLICATION	B+	4.000	13.20		
CSC	8920	GS	COMP SCIENCE TEACHING PEDAGOGY	S	1.000	0.00		
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	7.000	0.00		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	12.000	45.20	3.77
Cumulative	43.000	43.000	43.000	24.000	93.20	3.88

Term : Summer Semester 2020

College
College of Arts & Sciences

Student Type
Continuing or Returning

Academic Standing
Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	13.000	0.00		
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	7.000	0.00		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	0.000	0.00	
Cumulative	63.000	63.000	63.000	24.000	93.20	3.88

Term : Fall Semester 2020

College
College of Arts & Sciences

Student Type
Continuing or Returning

Academic Standing
Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8850	GS	ADVANCED MACHINE LEARNING	A	4.000	16.00		
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	9.000	0.00		
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	7.000	0.00		
MATH	6751	GS	MATHEMATICAL STATISTICS I	A+	3.000	12.90		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	23.000	23.000	23.000	7.000	28.90	4.13
Cumulative	86.000	86.000	86.000	31.000	122.10	3.94

Term : Spring Semester 2021

College
College of Arts & Sciences

Student Type
Continuing or Returning

Academic Standing
Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8950	GS	DIR RESEARCH IN COMP	A	4.000	16.00		

			SCI				
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	10.000	0.00	
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	6.000	0.00	

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	4.000	16.00	4.00
Cumulative	106.000	106.000	106.000	35.000	138.10	3.95

Term : Summer Semester 2021

College

College of Arts & Sciences

Student Type

Continuing or Returning

Academic Standing

Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	10.000	0.00		
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	10.000	0.00		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	0.000	0.00	
Cumulative	126.000	126.000	126.000	35.000	138.10	3.95

Term : Fall Semester 2021

College

College of Arts & Sciences

Student Type

Continuing or Returning

Academic Standing

Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R

CSC	8230	GS	SECURE AND PRIVATE AI	A	4.000	16.00	
CSC	8550	GS	ADVANCED ALGORITHMS	B+	4.000	13.20	
CSC	8950	GS	DIR RESEARCH IN COMP SCI	A	4.000	16.00	
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	8.000	0.00	

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	12.000	45.20	3.77
Cumulative	146.000	146.000	146.000	47.000	183.30	3.90

Term : Spring Semester 2022

College

College of Arts & Sciences

Student Type

Continuing or Returning

Academic Standing

Good Standing

Subject	Course	Level	Title	Grade	Credit Hours	Quality Points	Start and End Dates	R
CSC	8981	GS	RESEARCH IN COMPUTER SCIENCE	S	10.000	0.00		
CSC	8982	GS	LAB IN COMPUTER SCIENCE	S	10.000	0.00		

Term Totals	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Current Term	20.000	20.000	20.000	0.000	0.00	
Cumulative	166.000	166.000	166.000	47.000	183.30	3.90

Transcript Totals

Transcript Totals - (Graduate Semester)	Attempt Hours	Passed Hours	Earned Hours	GPA Hours	Quality Points	GPA
Total Institution	166.000	166.000	166.000	47.000	183.30	3.90
Total Transfer	0.000	0.000	0.000	0.000	0.00	0.00
Overall	166.000	166.000	166.000	47.00	183.30	3.90

Course(s) in Progress

Term : Fall Semester 2022

College

College of Arts & Sciences

Student Type

Continuing or Returning

Subject	Course	Level	Title	Credit Hours	Start and End Dates
CSC	8982	GS	LAB IN COMPUTER SCIENCE	11.000	
CSC	8999	GS	THESIS RESEARCH	9.000	