Jingyan (Horatio) Xu

CONTACT INFORMATION

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EDUCATION

Fordham University, NY, USA
Doctor of Philosophy, *Computer Science*, 2024 - Present
- Dissertation Advisor: Clavius Distinguished Professor, Dr. D. Frank Hsu
- Relevant Coursework: Artificial Intelligence, Cybersecurity Law, Advanced Computer Algorithm, Advanced Distributed System, Applied Cryptography

Fordham University, NY, USA
Master of Science, *Data Science*, 2022 - 2024
- GSAS Centennial Scholarship recipient
- Relevant Coursework: Natural Language Processing, Machine Learning, Data Mining, Computer Forensics, Big Data Computing

Stony Brook University, NY, USA
Bachelor of Science, *Applied Mathematics & Statistics* and *Economics*, 2018 - 2022
- Dean's List: Spring 2020, Fall 2020, Spring 2021, Fall 2021
- Relevant Coursework: Probability and Statistics, Probability Theory, Data Analysis, Operations Research: Stochastic Model, Applied Linear Algebra, Quantitative Finance, Foundations of Analysis, Data Mining, Mathematical Statistics

Correlation One
Data Science for All, 2021 - 2022
- Selected to participate in a 14-week data science Honors Fellowship (<1.4% acceptance rate, 3000+ applicants) with learning facilitated through real-world data science cases

Mannes School of Music, NY, USA
Pre-College Program, *Piano*, 2016 - 2018
- Advised by Irina Edelman

PUBLICATIONS

8. **J. Xu**, T. Yang, "What Counts as a Principal Reason? Testing Explanation Methods Under Regulation B," 6th ACM Symposium on Computer Science and Law (submitted)
7. W. Ye, **J. Xu**, Erick W. Rengifo, "Who Gets to Be a Bank? Digital Money, Regulatory Design, and the Remaking of Banking: Evidence from the United States, Hong Kong, and Singapore," SSRN (link)
6. **J. Xu**, Y. Wu, S. Y-C Chen, S. Patten, C. Schweikert and **D. F. Hsu**, "Diversity-Aware Ensemble of Quantum-Classical Models via Combinatorial Fusion", 2026 IEEE International Conference on Quantum Computing and Engineering (QCE) (link)
5. W. Ye, **J. Xu**, Y. Wu, "When AI Agents Meet MEV: Cross-Chain Arbitrage in the Agentic Economy", The 7th International Conference on Mathematical Research for Blockchain Economy (2026 MARBLE) (link)
4. Y. Wu, W. Ye, **J. Xu**, **D. F. Hsu**, "Bitcoin price prediction using machine learning and combinatorial fusion analysis," 2025 IEEE Conference on Artificial Intelligence (CAI), 2025. (link)

3. **J. Xu**, M. T. LaFleur, C. Schweikert, **D. F. Hsu**, "Enhancing SDG-Text Classification with Combinatorial Fusion Analysis and Generative AI," 2025 IEEE Conference on Pervasive and Intelligent Computing (PICom), pp. 58-65, 2025. (link)
2. **J. Xu**, Y. Wu, W. Ye, C. Schweikert, **D. F. Hsu**, "A Model Fusion Approach for Enhancing Credit Approval Decision Making", 2025 Artificial Intelligence for Business (AIxB), pp. 35-40, 2025. (link)
1. E. Roginek, **J. Xu**, **D. F. Hsu**, "InFusionLayer: a cfa-based ensemble tool to generate new classifiers for learning and modeling," 2024 IEEE 36th International Conference on Tools with Artificial Intelligence (ICTAI), pp. 756-763, 2024. (link)

* The faculty advisors for each project are also boldfaced

Services and Activities

Conference and journalrole

- The 18th International Conference on Computational Logics, Algebras, Programming, Tools, and Benchmarking 2027 (Technical Program Committee)
- Pattern Recognition (Reviewer)
- IEEE International Conference on Tools with Artificial Intelligence (ICTAI): 2025 (PC), 2026 (PC)

Events organizer role

- The 9th IEEE Conference on Dependable and Secure Computing, Oct. 9-11 (Local Arrangement Committee)
- Clavius Distinguished Lecture Series: Fall 2023, Spring 2024, Spring 2025, Fall 2025, F2026
- Symposium on Responsible AI (sponsored by Fordham, IBM, NYU, and the AI Alliance; Fall 2025)
- Fordham-IBM workshop: on Generative AI (Fall 2023)

Invited talks

- Fordham AI Summer Seminar (8/12/2026)
- Clavius Distinguished Workshop on Trustworthy AI (7/22/2026)
- Symposium on Responsible AI (10/17/2025)

Work Experience

Fordham University Department of Computer and Information Science
Graduate Assistant — Aug. 2023 - Present

- Work with the GSAS to initiate the process of establishing IEEE Student Branch at Fordham.
- Help to organize various events such as Fordham-IBM Workshop and Clavius Distinguished Lectures.
- Commit approximately 10 hours per week to support the courses: CISC 4090 Theory of Computation and CISC 3595/5595 Operating Systems.
- Guide class discussions, develop course material, prepare examinations, and hold tutor sessions.
- Attend every class to provide necessary assistance to the professor.
- Mentor 30 students per class and assist in professional development.

Data Science for All
Data Science Fellow — Oct. 2021 - Apr. 2022

- Collaborated with a group of five to answer the question of how to make outdoor activities like walking and cycling safer for pedestrians by using EPA walkability data over the course of the program

- Created a detailed 14-week project plan with biweekly meetings to assign deliverables and ensure timeline remained on track, received mentorship and guidance from two industry data scientists

Stony Brook Social Competence and Treatment Lab
Data Management Team Lead Research Assistant Aug. 2020 - May 2023

- Score measures, import scores, write, and edit syntax and data dictionaries using R.
- Design and organize aspects of REDCap data collection process, ensure data quality and problem-solving.
- Give formal group presentations on topics relevant to Autism Spectrum Disorder study for the lab members.

Musipire Music School and Academy
Piano Instructor Apr. 2019 - Present

- Prepare and plan a total of 11 classes that focus on performance, music theory, and aural practice
- Grade students' progress by written evaluation based on their work and participation
- Teach music history and background and guide students through practical exercises.

Stony Brook University
Teaching Assistant Feb. 2021 - May 2021, Jan. 2022

- Assisting students with coursework for ECO 108: Introduction to Economics, and AMS 210: Applied Linear Algebra
- Holding weekly office hours for a total of 400+ students enrolled in the courses to ask questions on assignments or contents taught during lectures
- Grading homework assignments and exams, regularly performing basic data entry tasks on students' assignments grades
- Providing courses feedback regarding class assignments, course progress, and suggestions for change for the professors

Stony Brook University Vertically Integrated Projects
Student Researcher Feb. 2021 - Jan. 2022

- Project: Insight on Critical Issues in Our Society through Data Science
- Analyze aspects of the ongoing pandemics to provide insight and strategies for control and treatment
- Assess how COVID-19 pandemic affect our nation's economic welfare through federal reserve economic data

BroadStreet Health, LLC
Data Quality Assurance Intern Apr. 2020 - Sep. 2020

- Collected and assessed trends for daily U.S. COVID-19 cases for 150+ counties across the west coast for data visualization
- Conducted quality assurance checks and verified data accuracy on daily COVID-19 numbers
- Built a data visualization incorporating over 3,000 rows of case count information, allowing public interest groups to make crucial decisions based on various projections

Certifications and Awards

- **AI Experiential Learning Lab: Industry Immersion**, issued by *IBM SkillsBuild* — Dec. 2025
- **Code Generation and Optimization Using IBM Granite**, issued by *IBM SkillsBuild* — Oct. 2025
- **Enterprise Design Thinking Practitioner**, issued by *IBM SkillsBuild* — Dec. 2025
- **AI Experiential Learning Lab: Industry Immersion**, issued by *IBM SkillsBuild* — Dec. 2025
- **DS4A / Empowerment 3.0 Certificate Honors**, issued by *Correlation One* — Apr. 2022
- **AT&T Summer Learning Academy Extern**, issued by *AT&T* — Jul. 2020
- **1st Place Winner, American Protégé International Music Talent Competition**, issued by *American Protégé* — Dec. 2015
- **Grade 8 Piano**, issued by *Associated Board of the Royal Schools of Music* — Jun. 2013
- **Certificate of Arts Grade Examination of China Music Theory**, issued by *Shanghai Conservatory of Music International Examination Board* — June 2013
- **Certificate of Arts Grade Examination of China Piano Grade 10**, issued by *Shanghai Conservatory of Music International Examination Board* — Oct. 2012
- **Grade 5 Music Theory**, issued by *Associated Board of the Royal Schools of Music* — Jun. 2012