

## Tianyu (Bell) Pan

Department of Electrical & Computer Engineering  
University of Florida,  
Gainesville Main Campus,  
Gainesville, FL, 32611  
Homepage: <https://bell-pan.com/>  
Google Scholar: [https://scholar.google.com/citations?user=O-AVB\\_gAAAAJ&hl=en](https://scholar.google.com/citations?user=O-AVB_gAAAAJ&hl=en)

Email: [tpan1@ufl.edu](mailto:tpan1@ufl.edu)  
Tel: (305)733-4460

### EDUCATION

**University of Florida, PhD – Electrical & Computer Engineering**  
**Lab: Florida Institute of National Security (FINS) & Applied Artificial Intelligence Group (AAIG)**  
Gainesville, FL  
GPA: 3.77 (4.0)  
Expected Graduate: Summer 2026  
**Committee:** Damon L. Woodard, Domenic Forte, Janise McNair, Bonnie Dorr

**University of Florida, MS – Electrical & Computer Engineering**  
Gainesville, FL 2026  
GPA: 3.77 (4.0)

**University of Florida, Graduate Certificate – Machine Learning (ECE)**  
Gainesville, FL 2025

**University of Florida, MA – Economics**  
**Specialize: Industrial Organization, Financial Economics**  
Gainesville, FL 2024  
GPA: 3.77 (4.0)

### EMPLOYMENT

**University of Florida (UF)**  
Instructor/Graduate Assistant 2022 – Present

**Florida International University (FIU)**  
Adjunct Instructor 2020  
Coca-Cola Professorship Research Assistant 2019 – 2020

### SELECTED WORK

1. **Pan, T.**, Woodard, D. (2026). GeoLAN: Geometric Learning of Latent Explanatory Directions in Large Language Models. *Under Review*. Available Online.
2. **Pan, T.**, Wormald, S., Woodard, D. (2026). From Makeya to Kernels: A Multi-Scale Geometric Framework for Robust Representation Learning. *Under Review*. Available Online.
3. Wormald, S., **Pan, T.**, Woodard, D., Forte, D. (2026). Exploring weightless neural networks: From logic gates to convolutional lookup tables. *Under Review*. Available Online.

4. **Pan, T.**, Shal-bar, T., Azis, B., Forte, D., Woodard, D. (2026). PHBF: A Persistent Hierarchical Bloom Filter for Semantic Search in High-Dimensional Streaming Data. *Under Review*.
5. **Pan, T.**, Bhandarkar, A.C., Cole, A.J., Wilson, R., Woodard, D. (2026). ViLID: Unmasking Multimodal Misinformation via Rationale-Enhanced Inconsistency Detection. *Under Review*.
6. **Pan, T.**, Dizon-Paradis, O., Woodard, D. (2026). Multimodal Co-Training with Subtractive Unlabeled-Benefit Bounds. *IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP 2026)*.
7. **Pan, T.**, Yang, Q., Cole, A.J., Wilson, R., Woodard, D. (2026). Psychology of Phishing Emails: Quantifying Persuasion Principles and Simulating Detection with Large Language Models. *Expert Systems with Applications, 131507*.
8. **Pan, T.**, Zhu, M., Cole, A.J., Wilson, R., Woodard, D. (2025). Lyapunov-Stable Adaptive Control for Multimodal Concept Drift. *39<sup>th</sup> Conference on Neural Information Processing Systems (NeurIPS 2025)*.
9. **Pan, T.**, & Woodard, D. L. (2025). Efficient Generalization via Multimodal Co-Training under Data Scarcity and Distribution Shift. *The 42<sup>nd</sup> ICML Conference Affinity Workshop New In ML*.
10. Jia, S., **Pan, T.**, Shan, G. (2025, August). Insiders Take Longer, Retail Hits Harder: Organizational Predictors of Data Breach Outcomes. In *Proceedings of 59th Annual Hawaii International Conference on System Science (HICSS)*.
11. Swarup, A., Bhandarkar, A., Wilson, R., **Pan, T.**, & Woodard, D. (2025, August). From Syntax to Semantics: Evaluating the Impact of Linguistic Structures on LLM-Based Information Extraction. In *Proceedings of the 1st Joint Workshop on Large Language Models and Structure Modeling (XLLM 2025)* (pp. 36-48).
12. Swarup, A., **Pan, T.**, Wilson, R., Bhandarkar, A., & Woodard, D. (2025, January). LLM4RE: A Data-centric Feasibility Study for Relation Extraction. In *Proceedings of the 31st International Conference on Computational Linguistics (COLING)* (pp. 6670-6691).
13. Yang, Q., **Pan, T.**, Cole, A.J., Wilson, R., Woodard, D. (2025). Accuracy, Feature Interpretability, and Usability of LLMs in Phishing Email Detection. *Under Review*. Available Online.

## **PATENT**

1. Woodard, D., Forte, D., **Pan, T.** (2026). Cognitive Embedded Real-Time Evaluation and Behavioral-Recognition Observer (CEREBRO): A Multimodal Remote Side-Channel Monitoring System with On-Device AI Inference, Secure Communication, Adaptive Sampling, and Lyapunov-Stable Adaptive Fusion Control for Real-Time Attack Detection, Predictive Maintenance, and Dynamic Threat Response. (**Status:** Provisional).
2. Woodard, D., **Pan, T.** (2025). Lyapunov-Stable Control for Multimodal Learning System Adaptation to Concept Drift. (**Status:** Provisional).
3. Woodard, D., **Pan, T.** (2025). MACO: Multimodal Agreement-Aware Co-Training with Dual-Threshold Pseudo-Labeling, Geometric Convergence, and Generalization Guarantees. (**Status:** Provisional).

4. Woodard, D., **Pan, T.**, Forte, D. (2025). Multimodal Retrieval-Augmented Generation System for Creative Production (MuseRAG): Cross-Modal Indexing, Generative Retrieval/Re-Ranking, and Attributed Output. (**Status:** Provisional).

### **BOOK CHAPTER**

1. Dizon-Paradis, O., Capecci, D., **Pan, T.**, Fu, RJC., Woodard, D. (2024). Machine Learning in Marketing Research: A Case Study of Cruise Tourism. *AI, ML, ROBOT APPLICATIONS IN HOSPITALITY BUSINESSES*. ISBN: 979-8-7657-8381-8.
2. **Pan, T.**, Fu, RJC. (2024). Seasonal Time Series Forecasting in the Hospitality Industry: A Novel Model of Data Decomposition with Machine Learning. *AI, ML, ROBOT APPLICATIONS IN HOSPITALITY BUSINESSES*. ISBN: 979-8-7657-8381-8.

### **GRANTED PROJECT**

1. Woodard, D. (PI), Bursztein, E. (Co-PI), **Pan, T. (Co-PI)**. (2024). SaTC: CORE: Small: GOALI: Predicting and Labeling Email Phishing from Social Influence Cues and User Characteristics. *National Science Foundation (NSF), US*.  
**Awarded:** \$500,000

*\* More experience with government grant and funding applications can be shared upon request.*

### **ACADEMIC HONORS AND AWARDS**

Herman W. Schnell Memorial Endowed Scholarship and Fellowship, <b>UF</b>	2024
EFTI Selected White Paper Travel Fund, <b>UF</b>	2023
Dr. Linda Thornton Endowed Scholarship, <b>UF</b>	2023
Certificate of Outstanding Merit, <b>UF</b>	2022
EFTI's Gefen Innovation Research Award, <b>UF</b>	2021 – 2022
Coca-Cola Professorship Research Assistant Award, <b>FIU</b>	2020 – 2021
South Beach Wine and Food Festival Scholarship Award, <b>FIU</b>	2018 – 2019
<i>WorldsAhead (President) Award, FIU</i>	2019
Dean's List Award, <b>FIU</b>	2017 – 2019
Teaching/Research Assistant Scholarship Award, <b>FIU</b>	2018 – 2019

### **COURSE TEACHING**

#### **University of Florida**

EEE 6512/EEE4930 Image Processing and Computer Vision (Spring, 2026)	<i>TA &amp; Co-instructor</i>
EEE 6825 Pattern Recognition and Intelligent Systems (Fall, 2025)	<i>TA &amp; Co-instructor</i>
EEE 6512 Image Processing and Computer Vision (Spring, 2025)	<i>TA &amp; Co-instructor</i>

### **PROFESSIONAL AND COMMUNITY SERVICES**

NeurIPS Conference 2026 <i>Reviewer</i>	2026
ICML Conference 2026 <i>Reviewer</i>	2026
AAAI Conference on Web and Social Media (ICWSM) 2026 <i>Reviewer</i>	2026
AAAI Conference 2026 <i>Reviewer</i>	2025
IEEE International Conference on Automatic Face and Gesture Recognition <i>Reviewer</i>	2024 – Present
Scientific Reports – Nature <i>Reviewer</i>	2024 – Present

## **PROFESSIONAL MEMBERSHIPS**

**ACL** – Association for Computational Linguistics

**ACM** – Association for Computing Machinery

**IEEE** – Institute of Electrical and Electronics Engineers

**INFORM** – The Institute for Operations Research and the Management Sciences

- Decision Analysis Society
- Analytics Society
- Computing Society

**ASQ** – American Society of Quality

**AAAS** – American Association for the Advancement of Science

## **ADDITIONAL INFORMATION**

**Language:** Chinese (Native), Cantonese (Native), English (Advanced)

**Software Skills:**

Latex, Python, R, MATLAB, SPSS, AMOS, SAS, Linux, Canvas, Slurm, Cloud Computing, Microsoft Office