

# Matheus Kunzler Maldaner

M.S. Student (*AI Systems + HCI*)

I am a first-year master's student at the University of Florida in the M.S. AI Systems Program. I am passionate about **Neurosymbolic AI** and **Human-Computer Interaction**. My research spans Differentiable Logic Gate Networks at the Florida Institute for National Security, Auditing Text-to-Image Model Outputs at Carnegie Mellon University and Designing Longer Running Agentic Systems with the Microsoft Research AI Frontiers group.

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-  [CV PDF](#)
-  [YouTube](#)

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-  [Google Scholar](#)
-  [matheusmaldaner](#)

## Education

Aug. 2025 -  
Present

### M.S. in AI Systems

University of Florida, Gainesville, FL

Aug. 2021 -  
May. 2025

### B.S. in Data Science

University of Florida, Gainesville, FL

Thesis: *Applications of Differentiable Logic Gate Networks*

Graduated Summa Cum Laude, Inducted into the UF Hall of Fame.

Feb. 2017 -  
May. 2021

### High-School Diploma

Marjory Stoneman Douglas High School, Parkland, FL

## Industry Research Experience

Summer 2025

**Microsoft Research**, Redmond, WA

### *Research Intern, AI Frontier Group*

Mentor: Dr. Hussein Mozannar, Dr. Gagan Bansal, Dr. Adam Journey

Worked on enabling Agentic Systems to perform longer running tasks, and on the development on SentinelBench.

## Academic Research Experience

Summer 2024  
- Present

### **Carnegie Mellon University, Pittsburgh, PA**

#### *Research Intern, Human Computer Interaction Institute*

Mentor: Dr. Jason Hong, Dr. Motahhare Eslami, Dr. Kenneth Holstein, Wesley Deng  
Developing tools to audit text-to-image models.

Fall 2023 -  
Present

### **Florida Institute for National Security (FINS), Gainesville, FL**

#### *Research Assistant, Neurosymbolic AI*

Mentor: Dr. Damon Woodard, Dr. Domenic Forte, Dr. Olivia Dizon-Paradis, Stephen Wormald

Working on the application and optimization of Differentiable Logic Gate Networks.

## Leadership Experience

Fall 2023 -  
Present

### **Data Science and Informatics (DSI) Organization, Gainesville, FL**

#### *President,*

Overseeing an executive board of 30 students. Won the UF Student Organization of the Year Award.

Fall 2024 -  
Present

### **IEEE Signal Processing Society at UF, Gainesville, FL**

#### *Co-Founder & Vice-President,*

Co-founded the UF chapter of the IEEE Signal Processing Society.

Fall 2024 -  
Present

### **UF AI Club, Gainesville, FL**

#### *Director of Research,*

Leading the research initiatives for the UF AI Club.

Fall 2023 -  
Spring 2024

### **UF American Statistical Association (ASA) Chapter, Gainesville, FL**

#### *Vice President,*

Created a mentorship program to pair 60 students to mentors.

- 2018 - 2021 **Marjory's Garden**, Parkland, FL  
*President,*  
Led Marjory's Garden organization during high school achieving 1000+ volunteering hours.
- 2020 - 2021 **National Honor Society**, Parkland, FL  
*President,*  
Served as President of the National Honor Society chapter and delivered the Pledge of Allegiance.
- 2020 - 2021 **Mu Alpha Theta Calculus Team**, Parkland, FL  
*Captain,*  
Led the Mu Alpha Theta Calculus competition team and hosted practice sessions.

## Honors and Awards

- 2025 UF HiPerGator Early Career Award
- 2025 UF Gator Create 3 of 7 Tracks
- 2025 UF Gator Hack 1st Place
- 2025 Heidelberg Laureate Forum  
1 of 200 young researchers selected to attend the annual Heidelberg Laureate Forum with Nobel Laureates and Fields Medalists.
- 2025 Microsoft Intern Puzzle Day Fastest Solver
- 2025 ITNG Best Student Paper Award
- 2025 ITIAS Hack Space Con Scholarship  
Received scholarship to attend Hack Space Con and tour Kennedy Space Center.
- 2025 FGLSA Travel Support
- 2025 UF CLAS Excellence Award Finalist  
1 of 12 finalists for the College of Liberal Arts and Sciences Excellence Award.
- 2025 UF Outstanding Leader Award  
Recognized as 1 of 7 graduating seniors for outstanding leadership.
- 2025 UF Student Organization of the Year  
Awarded as President of Data Science and Informatics (DSI).
- 2025 UF Career Influencer Award
- 2025 REPU Scholar

- 2025 **UF Hall of Fame**  
The highest honor given to students at the University of Florida.
- 2025 **Summa Cum Laude Honors Thesis**  
Completed honors thesis with distinction, unanimously approved with no revisions.
- 2025 **UF Outstanding Scholars and Leaders Award**  
Recognized as 1 of 7 graduating seniors for leadership and scholarship.
- 2025 **UF SwampHacks X Best AI Hack**  
For building a differentiable logic gate visualizer for better explainability.
- 2025 **ASA DataFest Best Visualization**  
A weekend-long data analysis competition for students of any major.
- 2024 **UF Gator Create 2nd Place**
- 2024 **UF Gator Hack Most Popular**
- 2024 **ShellHacks Most Popular**  
Florida's largest hackathon, a 36-hour event where students build new technology projects and compete for prizes.
- 2024 **FGLSAMP Scholar**
- 2024 **USCLAP 2nd Place Overall**  
An international competition for undergraduate students to showcase their data analysis projects from their statistics courses.
- 2024 **NSF Travel Award**  
Awarded travel funding to present first-author demo paper at HCOMP 2024.
- 2024 **Hispanic Scholarship Fund Scholar**  
Selected as a scholar for the Hispanic Scholarship Fund.
- 2024 **UF Joe Glover Data Science Scholarship**
- 2024 **UF AI Scholar**  
Recognized for exceptional potential and achievements in AI and machine learning.
- 2024 **UF University Scholar**
- 2024 **Apple Pathways Alliance Fellow**
- 2024 **ASA DataFest 1st Place**  
A weekend-long data analysis competition where teams work to share insights from real-world data.
- 2024 **OSC Hackathon Best AI Hack & 2nd Place**  
A hackathon hosted by the UF Open Source Club.
- 2024 **William G. Cross Award Finalist**

- 2024 FURC Travel Award
- 2024 UF GenAI Arts Competition 2nd Place Overall  
A competition that celebrates the creative use of generative AI in various artistic domains.
- 2024 UF AI Days Hackathon Most Popular Award  
A hackathon as part of UF's AI Days, where students develop innovative AI-powered solutions.
- 2023 President's Honor Roll
- 2023 UF Gator Hack II Finalist
- 2023 UF AI Days Hackathon Finalist  
A hackathon as part of UF's AI Days, where students develop innovative AI-powered solutions.
- 2021-2024 Dean's Honor List
- 2021-2024 Bright Futures Program Scholar

## Publications

- 6 **Magnetic-UI: Towards Human-in-the-loop Agentic Systems**  
Hussein Mozannar, Gagan Bansal, Cheng Tan, Adam Journey, Victor Dibia, Jingya Chen, Jack Gerrits, Tyler Payne, Matheus Kunzler Maldaner, Madeleine Grunde-McLaughlin, Eric Zhu, Griffin Bassman, Jacob Alber, Peter Chang, Ricky Loynd, Friederike Niedtner, Ece Kamar, Maya Murad, Rafah Hosn, Saleema Amershi  
*Microsoft Research AI Frontiers (arXiv preprint). 2025.*

[!\[\]\(bd1a142de767a21e5362c595f844a4ff\_img.jpg\) Project](#) [!\[\]\(d4257ae6a3e163e6d467b3eb87960fa1\_img.jpg\) PDF](#) [!\[\]\(37da042f270bb1ebdb248503fcdcdd43\_img.jpg\) Blog](#) [!\[\]\(22b1bf7712f21472f961e36af9cc7acb\_img.jpg\) Code](#)

- C5 **Seeing Twice: How Side-by-Side T2I Comparison Changes Auditing Strategies**

Matheus Kunzler Maldaner, Wesley Hanwen Deng, Jason I. Hong, Ken Holstein, Motahhare Eslami  
*ACM CI. 2025.*

[!\[\]\(0aff635c4179ba9e710b00f4b01d3b20\_img.jpg\) Project](#) [!\[\]\(29658d981ebdf5edc259074cbf6110e0\_img.jpg\) PDF](#) [!\[\]\(9b3d169a802e50e3425ebff869ff6250\_img.jpg\) Preview](#)

- C4 **eXpLogic: Explaining Logic Types and Patterns in DiffLogic Networks**

Stephen Wormald, David Koblah, Matheus Kunzler Maldaner, Domenic Forte, Damon L. Woodard  
*ITNG. 2025.*

- C3  [Project](#)  [PDF](#)  [Best Student Paper Award](#)
- MIRAGE: Multi-model Interface for Reviewing and Auditing Generative Text-to-Image AI**  
Matheus Kunzler Maldaner, Wesley Hanwen Deng, Jason I. Hong, Ken Holstein, Motahhare Eslami  
*HCOMP. 2024.*
- J2  [Project](#)  [PDF](#)  [Preview](#)
- Abstracting General Syntax for XAI after Decomposing Explanation Sub-Components**  
Stephen Wormald, Matheus Kunzler Maldaner, Kristian O'Connor, Olivia P. Dizon-Paradis, Damon L. Woodard  
*Springer AI. 2024.*
- 1  [Project](#)  [PDF](#)
- Efficient and Transparent Machine Learning: Exploring Applications of Differentiable Logic Gate Networks**  
Matheus Kunzler Maldaner  
*Undergraduate Thesis, University of Florida. 2025.*

## Press

- Apr. 2025 "UF's Maldaner mixes and mingles with global AI experts," UF Department of Engineering Education
- Apr. 2025 "FINS Team Wins 1st Place @ UF AI Days," Florida Institute for National Security
- Apr. 2025 "UF AI Scholar Matheus Kunzler Maldaner," University of Florida AI<sup>2</sup> Center
- Apr. 2025 "Matheus Kunzler Maldaner Biography," UF Center for Undergraduate Research
- Apr. 2025 "Knowledge Should Be Accessible To All," UF Research Computing
- Apr. 2025 "Parkland's Matheus Kunzler Maldaner Named to UF Hall of Fame," Parkland Talk

Apr. 2025	"DSI Wins Org of the Year," UF Artificial Intelligence and Informatics Research Institute
Apr. 2025	"UF AI Scholar Matheus Kunzler Maldaner inducted in the UF Hall of Fame," UF Artificial Intelligence and Informatics Research Institute
Mar. 2024	"What has UF been doing with AI so far?," The Independent Florida Alligator
Mar. 2025	"Third annual DataFest brings together students from across UF," UF PHHP
Oct. 2024	"HCOMP 2024 — HCII coverage," CMU HCII
Apr. 2024	"A whirlwind of big data — DataFest 2024 recap," UF PHHP

## Mentoring

2024	<b>Maryam Elfakir</b> <i>Undergraduate Student</i> Mentored as part of the Society of Hispanic Professional Engineers (SHPE) mentorship program.
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## Service

### Organizer

Data Science and Informatics Symposium (**DSI Symposium**) at University of Florida 2025

UF AI2 Summit (**AI2 Summit**) at University of Florida 2025

### Program Committee

### Reviewer

ACM CHI Conference on Human Factors in Computing Systems (**CHI**) at ACM SIGCHI 2025

SEA Workshop @ NeurIPS (**SEA**) at NeurIPS 2025

AAAI/ACM Conference on AI, Ethics, and Society (**AIES-25**) at AAAI & ACM 2025

### Institutional

IEEE EMBS at UF — Cancer/Mental Health Awareness Design-a-thon  
(Judge), October 2025

### Member

2025 — Present	Association for Computer Machinery ( <b>ACM</b> )
2024 — Present	IEEE Signal Processing Society ( <b>IEEE SPS</b> )
2024 — Present	Institute for Electrical and Electronics Engineers ( <b>IEEE</b> )
2024 — Present	ACM Special Interest Group on Computer-Human Interaction ( <b>SIGCHI</b> )
2024 — Present	Association for the Advancement of Artificial Intelligence ( <b>AAAI</b> )
2024 — Present	National Society of Professional Engineers ( <b>NSPE</b> )
2023 — Present	Society of Hispanic Professional Engineers ( <b>SHPE</b> )
2023 — 2024	American Statistical Association ( <b>ASA</b> )

## References

**Dr. Damon L. Woodard**, Professor; Director, Florida Institute for National Security

Florida Institute for National Security (FINS), ECE

*University of Florida*

[ece.ufl.edu/people/faculty/damon-woodard](http://ece.ufl.edu/people/faculty/damon-woodard)

**Dr. Jason I. Hong**, Professor Emeritus

Human-Computer Interaction Institute

*Carnegie Mellon University*

[hcii.cmu.edu/people/jason-hong](http://hcii.cmu.edu/people/jason-hong)

**Dr. Hussein Mozannar**, Senior Researcher

AI Frontiers

*Microsoft Research*

[husseinmozannar.github.io](http://husseinmozannar.github.io)

**Dr. Cátia Silva**, Instructional Associate Professor

Department of Electrical & Computer Engineering

*University of Florida*

[ece.ufl.edu/people/faculty/catia-silva](http://ece.ufl.edu/people/faculty/catia-silva)

**Dr. Elizabeth Johnson**, Associate Instructional Professor  
Department of Statistics  
*University of Florida*  
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