Paul Amoruso, Ph.D.

U.S. Citizen
Inaugural UCF ECE Future Faculty Laureate (FFL)
Board Member, *Computational Social Science Society of the Americas (CSSSA)*
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I. Technical Interests

Artificial Intelligence for STEM Education, FPGA-Based ML Acceleration, Generative AI and Intelligent Tutoring Systems, Micro-Credentialing and Learning Analytics, Educational Data Mining, Agent-Based Modeling, Computer Architecture, and LMS Automation.

II. Education

Ph.D., Computer Engineering **Fall 2023 - Spring 2026**
ECE Department, University of Central Florida, Orlando, FL, GPA: 4.0/4.0
Advisor: Dr. Ronald F. DeMara
Dissertation Title: *Machine Learning Acceleration of Micro-Credentialing, Knowledge Gap Remediation, and Micro-Recruiting of STEM Assessments: from Learner Data to Hardware*

M.S., Computer Engineering **Spring 2022 - Spring 2023**
ECE Department, University of Central Florida, Orlando, FL, GPA: 4.0/4.0
Advisor: Dr. Ronald F. DeMara
Thesis Title: *Micro-Credentialing with Fuzzy Content Matching: An Educational Data-Mining Approach*

B.S., Computer Engineering **Summer 2017 - Fall 2021**
ECE Department, University of Central Florida, Orlando, FL, GPA: 3.972/4.0
Honors: Summa Cum Laude

III. Proceedings and Presentations

Journal Publications

1. **P. Amoruso**, L. O. Campbell, J. A. Mejia, F. E. Hernandez, and R. F. DeMara, "AchieveUp: Personalizing Digitized Assessments and Remediation using an Automated Micro- Credentialing Framework for Canvas LMS," *ASEE Computers in Education (COED) Journal* 14(4), 2025. DOI: 10.18260/B34C-2C-10192

Conference Publications & Presentations

21. R. Yarnell, **P. E. Amoruso,** E. L. Amoruso, and R. F. DeMara, "Simulating Classroom Social Dynamics with LLM Agents: Peer Review, Hint Sharing, and Misinformation in Technical Education," accepted to *Proceedings of Computational Social Science Society of the Americas (CSSSA) 2026 Annual Conference*, Santa Fe, NM, USA, October 29 - November 1, 2026.

20. **P. Amoruso,** A. Huang, V. R. Addala, E. de la Mora, and R. F. DeMara, "Measuring AI Engagement Maturity in Professional Communities: A Human-Validated LLM Annotation Pipeline, with Evidence from Hospitality Graduate Professionals," accepted to *Proceedings of Computational Social Science Society of the Americas (CSSSA) 2026 Annual Conference*, Santa Fe, NM, USA, October 29 - November 1, 2026.

19. E. L. Amoruso, **P. E. Amoruso,** A. Broqi, and C. C. Zou, "Zombie APIs: Detecting Runtime-

Reachable but Deprecated Endpoints," accepted to *2026 IEEE International Symposium on Networks, Computers and Communications (ISNCC)*, Bristol, UK, September 8–10, 2026.

18. **P. E. Amoruso,** M. Hossain, and E. L. Amoruso, "Score-Reflow: Automating Grade Refinement Across Learning Management Systems in a Large-Enrollment Microelectronics Laboratory Course", in Proceedings of *ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI-2026)*, Canandaigua. DOI: 10.1145/3787109.3816049.
17. R.Yarnell, **P. E. Amoruso,** and A. Emeterio, "RTL-SMARTIE: An AI-Assisted Tutor for RTL Design Education", in Proceedings of *ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI-2026)*, Canandaigua, NY, USA, June 22-24. DOI: 10.1145/3787109.3815321.
16. **P. E. Amoruso,** R.Yarnell, and R. F. DeMara, "FPGA-based Acceleration of LLM Inference Using Compression-Based Similarity Classification", in *Proceedings of ACM/IEEE Great Lakes Symposium on VLSI (GLSVLSI-2026)*, Canandaigua, NY, USA, June 22-24. DOI: 10.1145/3787109.3815321.
15. E. L. Amoruso, **P. E. Amoruso,** and C. C. Zou, "Magic-Number-Driven File Integrity Monitoring for Ransomware Detection and Real-Time Recovery," in *Proceedings of IEEE SmartNets*, Rome, Italy, July 7-9, 2026.
14. A. Huang, **P. Amoruso**, V. Addala, and E. de la Mora, "Workforce-Embedded Learning with Generative AI in Hospitality and Tourism: A Hybrid Analysis of Skills, Attitudes, and Curriculum Implications," accepted to *UCF AI Spring Research Day, Institute of Artificial Intelligence,* University of Central Florida, Orlando, FL, February 6, 2026.
13. **P. Amoruso**, V. R. Addala, A, Pindoria, and R. F. DeMara, "IUSE:HSI: ReQuillify: a Learner-Driven Facility for Building Remediation Capacity in STEM Courses," in *Proceedings of American Association of Engineering Education, 2026 Annual Conference (ASEE-2026),* Charlotte, NC, USA, June 21-24, 2026.
12. R. Yarnell, **P. Amoruso,** and R. F. DeMara, "Prompt Engineering for FPGA Design: LLM-Driven Workflows Beyond HLS," in *Proceedings of IEEE International Conference on Microelectronics (ICM)*, Cairo, Egypt, December 14, 2025.
11. **P. Amoruso**, Baiyun Chen, and R. F. DeMara, "Explicating Model Parameters of Human Tutor and AI-based Assistance to Bolster Micro-Credentialing: 14 Semesters of Multivariate Learner Data from a Large Enrollment Engineering Course," in *Proceedings of Computational Social Science Society of the Americas (CSSSA)*, Santa Fe, NM, USA, November 6 - 9, 2025.
10. **P. Amoruso,** L. O. Campbell, and R. F. DeMara, "Progressing from Micro-Credentialing to Micro-Recruiting: Connecting Employers with Ideally-Badged Learners via Last-Stage Invocation of GenAI," in *Proceedings of 2025 IEEE Frontiers in Education Conference (FIE'25),* Nashville, TN, USA, November 2 - 5, 2025.
9. Ronald F. DeMara, Kevin Yee, and **Paul Amoruso**, "Generative AI in STEM Education: Which Targets are Most Advantageous to Facilitate Learning and Employability?" Presented at *Society for Information Technology & Teacher Education (SITE) Interactive Online 2025*, September 11 – 12, 2025.
8. **P. Amoruso** and R. DeMara, "Compression-Assisted Zero-Shot Prompting of Large Language Models (LLMs) for Educational Skill Classification of Microprocessor Curricula", in *Proceedings of the Great Lakes Symposium on VLSI 2025*, pp. 498–502.
7. **P. Amoruso,** I. Garibay, L. O. Campbell, J. A. Mejia, F. E. Hernandez, and R. F. DeMara, "IUSE:HSI: A NetLogo-based Approach to Predictive Estimation of Student Performance and Corresponding Tutoring Demand within STEM Undergraduate Courses," in *Proceedings of ASEE*

2025 Annual Conference, Montreal, Canada, June 24, 2025.

6. **P. Amoruso**, L. O. Campbell, R. F. DeMara, "Automated Micro-Credentialing and AI-Enhanced Remediation for Online STEM Assessments," presented at *2025 Florida Online Innovation Summit (FOIS)*, University of Central Florida, FL, USA, April 10, 2025.
5. **P. Amoruso**, B. Chen, R. F. DeMara, "GenAIprime: Generative AI for Remediation-Priming of Knowledge Gaps by Dynamically Creating Multimedia Learning Resources," in *Proceedings of 15th IEEE Integrated STEM Education Conference (ISEC)*, Princeton University, NJ, USA, March 15, 2025.
4. **P. Amoruso**, I. Garibay, R. F. DeMara, "Agent-Based Model for Optimal Remedial Staffing to Achieve Learning Outcomes within Cost Constraints," Poster presentation at *Computational Social Science Society of the Americas (CSSSA) Annual Conference,* Santa Fe, NM, USA, October 24-27, 2024. **Recognition: Best Poster Award of Conference**
3. N. Ari, R. Yarnell, **P. Amoruso**, J. Mell, and R. DeMara, A. Wu, "FOCAL: Feature-Oriented Cellular Automata Learning for Convolution-Free Image Classification," in *Proceedings of 12th IEEE International Conference on Intelligent Systems (IEEE-IS)*, Varna, Bulgaria, August 29-31, 2024.
2. **P. Amoruso**, O. Garibay, L. O. Campbell, and R. F. DeMara, "Instructor-Facing Graphical User Interface for Micro-Credential Designation and Refinement in STEM Curricula," in *Proceedings of 2024 ASEE Southeast Section Annual Meeting*, Marietta, Georgia, March 10 – 12, 2024. 10.18260/1-2-45539.
1. **P. Amoruso**, R. F. DeMara, L. O. Campbell, F. Hernandez, and A. Mejia, "Personalizing Digitized Assessments and Remediation using an Automated Micro-Credentialing Framework," *Online Learning Consortium (OLC) 2022 Conference on Accelerating Online Learning Worldwide*, Orlando, FL, Nov. 15, 2022.

IV. Honors and Awards

A. Scholarships and Fellowships

- **David T and Jane M Donaldson Perpetual Memorial Scholarship**, College of Engineering and Computer Science, 2025-2026.
  Monetary Amount: ***$2,000***
- **Future Faculty Laureate**, Electrical and Computer Engineering Dept., 2024-2026.
  Monetary Amount: ***$12,000 discretionary budget***

  Description: Provides bright and promising ECE graduate students having aptitude for academic employment with opportunities to learn how to conduct various faculty activities including teaching a class as an instructor of record, grant proposal writing, course materials development, instructional technologies, undergraduate/graduate technical mentoring, NSF programs solicitations/processes including meeting with CAREER awardees, and attendance at STEM Educational Conferences, and the academic hiring process.

  A budget $12K over two years is provided to support progression through eight key milestones: obtaining teaching assistant experience, completing formal training in educational skills, implementing course enhancements, authoring STEM publications, participating in professional events, mentoring undergraduate learning assistants, delivering a UCF ECE course as instructor of record, and gaining immersion in funding proposal processes.
- **UCF Graduate Presentation Fellowship**, University of Central Florida, 2024 – 2025

Monetary Amount: **$1000**

B. Awards .....

- **SGA Travel Award**, University of Central Florida Student Government, 2024 – 2025
  Monetary Amount: **$950**
- **Best Poster Award**, Computational Social Science Society of the Americas (CSSSA), 2024
  Monetary Amount: **$500**
- **Best Graduate Teaching Assistant Award**, UCF Electrical and Computer Engineering Dept., 2023.
  Monetary Amount: ***$1000***

  Graduate Teaching Assistants (GTAs) from the Electrical and computer engineering department were automatically selected to compete in the award. Excellence in serving as a Graduate Teaching Assistant is demonstrated by evidence from student survey responses.
- *UCF Three Minute Thesis (3MT) Competition*, university-level finalist: Nov. 14, 2022
- *UCF CECS Senior Design Day Showcase*, First Place Award for ECE Projects: Fall 2021
- *Dean's List*, University of Central Florida: 2018, 2019, 2020, 2021
- *ACM Complimentary Membership*, bestowed for reviewer service: May 2024
- *President's Honor Roll*, University of Central Florida: Spring 2020 - Fall 2020

C. Industry Collaboration .....

- **In-Kind Contribution**, *Adzuna Inc.* API access, market value *$2000* academic pricing plan, March - April 2025.

V. Seminars and Invited Talks

- *Train Your Own Model and Prompt Like A Pro!,* June 11, 2026, AIRE Summer Camp, Rosen College of Hospitality Management, UCF, Orlando, Florida, USA
- *CECS Showcase: College of Engineering and Computer Science Programs,* June 11, 2026, AIRE Summer Camp, Rosen College of Hospitality Management, UCF, Orlando, Florida, USA
- *AI in Student Research: Posters from Student Research Week*, April 8, 2026, John C. Hitt Library, UCF, Orlando, Florida, USA
- *AI-Infused Pedagogy: Designing Transformative Assignments,* April 8, 2026, Rosen College, UCF, Orlando, Florida, USA
- *Knights in Focus,* January 31, 2026, UCF, Orlando, Florida, USA. URL: https://www.youtube.com/shorts/BYn05d5VDDw
- *AchieveUp: Skill-Tagging, from Learning Objectives to Digital Badges*, December 3, 2025, Digital Learning Center, UCF, Orlando, Florida, USA
- *Machine Learning Acceleration of Micro-Credentialing, Knowledge Gap Remediation, and Micro-Recruiting of STEM Assessments: from Learner Data to Hardware*, August 12, 2025, Electrical and Computer Engineering Graduate Seminar, UCF, Orlando, Florida, USA
- *Autonomous Design Agents using Generative AI*, August 2, 2025, CS senior design, UCF, Orlando, Florida, USA
- *Applications of the Academic Vigilance Environment*, August 2, 2025, CS senior design, UCF,

Orlando, Florida, USA

- *The Need for Priming Presenters for Large Presentations*, May 2, 2025, Computational Social Science Society of the Americas (CSSSA) Board Meeting, Virtual
- *Concepts on Increasing Student Involvement: A Student-Led Project Mentorship Initiative*, March 21, 2025, Computational Social Science Society of the Americas (CSSSA) Board Meeting, Virtual
- *From Curiosity to Complexity: Paul Amoruso's Journey into Agent-Based Modeling*, October 26, 2024, The Flux by Epistemix, Santa Fe, New Mexico. URL: https://youtu.be/FFtyG0Y-J8I?si=c-V4gHRFG0vbL5zX
- *Perspectives on Graduate Teaching Assistantships spanning challenges and successes*, August 23, 2024, ECE GTA Orientation, UCF, Orlando, Florida
- *Engineering Initiative Meeting on Integrated Course Search and Credentialing for Higher-Education*, November 5, 2024, Center for Distributed Learning (CDL) meeting, UCF, Orlando, Florida

VI. Presentation/Participation in Conferences/Seminars

- Technical presentation at *Computational Social Science Society of the Americas (CSSSA)*, Santa Fe, NM, USA, November 7, 2025
- Workshop presentation at *Computational Social Science Society of the Americas (CSSSA)*, *CSSSA Presents* SIG, Santa Fe, NM, USA, November 6, 2025
- Technical presentation at the *2025 IEEE Frontiers in Education Conference (FIE)*, Nashville, TN, USA, November 3, 2025Catalyst Conversation at the 2025 *Society for Information Technology & Teacher Education (SITE)*, Online, September 11, 2025
- Technical presentation at *Great Lakes Symposium on VLSI* 2025, New Orleans, LA, USA, July 1, 2025
- Poster presentation at *ASEE 2025 Annual Conference*, Montreal, Canada, June 24, 2025
- Technical presentation at Florida Online Innovation Summit (FOIS), University of Central Florida, FL, USA, April 10, 2025.
- Technical presentation at *ISEC*, Princeton University, NJ, USA, March 15, 2025.
- Technical presentation at UCF Computer Science Senior Design course: Sponsorship Pitches, University of Central Florida, Orlando, Florida, USA, January 8, 2025
- Poster presentation at *CSSSA*, Santa Fe, New Mexico, October 24-27, 2024.
- Technical presentation at *ASEE-SE*, Marietta, Georgia, March 10-12, 2024.
- Technical presentation at UCF Computer Science Senior Design course: Sponsorship Pitches, University of Central Florida, Orlando, Florida, USA, January 17, 2024
- Online Learning Consortium (OLC) Accelerate Symposium, Technical Submission PowerPoint presentation, Orlando, Florida, November 1-3, 2022.

VII. Professional Experience

A. Research Experience

Florida Polytechnic University ***August 2026 - Present***

Assistant Professor, *Dept. of Computer Engineering*

- Establishing a research program spanning AI for STEM education, FPGA-based ML acceleration, and generative AI tutoring systems within the Department of Computer Engineering.

Rosen College of Hospitality Management **May 2026 - July 2026**

Postgraduate Research Associate, *Rosen College, UCF*

- Conducting applied research in AI-enhanced workforce education under Dr. Arthur Huang, including human trafficking labor exploitation analysis using machine learning (XGBoost/SHAP on CTDC datasets) and AI literacy curriculum development for the AIRE summer camp program.

Computer Architecture Laboratory **Jan. 2022 - Spring 2026**

Graduate Research Assistant, NSF-IUSE: HSI Research Grant *ECE Dept., UCF*

- As lead technical GRA on a 5-year NSF grant (EES-1953606), I research novel applications of *Assistive AI* to automate student micro-credentialing, as well as the novel application of *Generative AI* for post-assessment remediation. My research and publications spanned both AI/processing aspects in the ECE domain and instructional delivery topics in the STEM educational domain.

B. Teaching Experience

EEL3801 Computer Organization **Fall 2025 - Spring 2026**

Instructor of Record *ECE Dept., University of Central Florida*

Redesigned Computer Architecture course to integrate ARMv7 architecture concepts and hands-on learning. Developed materials to teach:

- System components, ISA fundamentals, and assembly programming for ARMv7
- Performance analysis, ALU design, control/datapath implementation, and memory hierarchy
- Emerging device technologies and practical skills using assembler tools, emulators, and processor simulators (e.g., MARS, JArmEmu, CPUlator)

EGN 3420 Engineering Analysis **Spring 2026**

Graduate Teaching Grader (GTG) *ECE Dept., University of Central Florida*

EEE4750 Digital Signal Processing Fundamental **Fall 2025 - Spring 2026**

Graduate Teaching Grader (GTG) *ECE Dept., University of Central Florida*

EEE4701 Verification and Validation of Digital Systems **Fall 2025**

Graduate Teaching Grader (GTG) *ECE Dept., University of Central Florida*

EEL3801 Computer Organization **Summer 2022 - Summer 2025**

Graduate Teaching Grader (GTG) *ECE Dept., University of Central Florida*

Received **Best Graduate Teaching Assistant Award in ECE Department at UCF of 2023** in consideration of:

- Tutoring students via post-test remediation sessions in EPC and/or ECE labs
- Spearheaded a technical initiative to investigate operational flow in migration from “Classic Quiz” Canvas LMS quizzes to the "New Quiz" format. This was provided to UCF Digital Learning and has been utilized by multiple UCF CECS faculty
- Substitute instructor for a session of the lab in EEL3801 to accommodate sudden unavailability of the lab GTA
- Directed and managed up to 4 UTAs performing post-assessment remediation four days per week

Substitute instructor *ECE Dept., University of Central Florida (July 1, 2025)*

- Provided in-depth instruction on advanced device technologies, including Chip Yield, Moore’s Law, and Technology Scaling, fostering student understanding of semiconductor fundamentals.

EGS1006 Introduction to Engineering **Fall 2019**

Undergraduate Teaching Assistant (UTA) *CECS, University of Central Florida*

- Lead laboratory session of up to 40 students for three days each week

- Responsible for managing and grading assignments for about 120 students during the semester.
- Consisted of teaching the steps to build and program the TI-RSLK Unit and then application testing where it navigates through a maze

C. Industry Experience

Information Technology Consultant **Dec 2015 - Jul 2024**
EMA Computers, Inc. *Altamonte Springs, FL*

- Enterprise-level computer and server provisioning, management, and auditing
- Firewall deployment and security configurations for corporate endpoint protection
- AI application development including but not limited to network monitoring
- Developed, designed, and maintained corporate websites

D. Mentoring Experience

Undergraduate Senior Design - Technical Advisor & Sponsor
University of Central Florida

- Advised **26** undergraduate senior design students across three project cycles (Spring 2024–Spring 2026).
- Sponsored and guided **5** teams in Computer Science and Engineering
- Mentored **3** graduate students (1 Ph.D., 2 M.S.) on research in AI-driven micro-credentialing, NLP, and FPGA acceleration

Spring 2024 - Fall 2024:
1. Jason Saini, BSCS student
2. Justin Gamboa, BSCS student
3. Jordan Morillo, BSCS student
4. Ramir Dalencour, BSCS student
5. David Santamaria, BSCS student

Spring 2025 - Summer 2025:
1. Marco Gerena, BSCS student
2. Andres Quintero, BSCS student
3. Chaya Jasculca, BSCS student
4. Kota Ramsey, BSCS student
5. Nicolas Sanchez, BSCS student

Fall 2025 - Spring 2026:
1. Evan Wrote, BSCS student
2. Tuankiet Vu, BSCS student
3. Dylan Katchen, BSCS student
4. Haley Cohen, BSCS student
5. Aaron Aberasturia, BSCS student
6. Kelly Shirley, BSCS student
7. Caleb Elliott, BSCS student
8. Jacobo Forero, BSCS student
9. Dexter Pressley, BSCS student
10. Andrew Chambers, BSCS student
11. Sammy Fares, BSCS student

Summer 2026 - Present:
1. Mason Alcock, BSCS student
2. Mark Stevens, BSCS student
3. Aidan Leith, BSCS student
4. João Casas-Rocha, BSCS student
5. Tadiwanashe Mukonka, BSCS student

Graduate Student Mentoring
1. Venkateswara Rao Addala - M.S. student in Computer Science
2. Ayush Shashikant Pindoria - Ph.D. student in Computer Engineering
3. Francisco Soriano - M.S. student in Computer Engineering

VIII. Professional Training and Course Design

A. Formal Coursework

- Completed *EME6613: Instructional System Design*. This UCF Graduate course covered systematic analysis and design of instruction. Completed group project on developing a higher education course analysis and treatment plan for teaching Punctuality and Time Management skills.
- Completed *UCF's Preparing Tomorrow's Faculty* course. This UCF Graduate Studies development course covers a comprehensive approach to student learning and motivation involves integrating course design with effective teaching pedagogies, using ongoing assessment and feedback, and fostering a positive course climate

that supports students' career development including the preparation of a teaching philosophy statement.

- Completed EEL 6938: *Special Topics in ECE: Professional Communications for Engineers*.

B. Conference Participation (Professional Development)

- Attended the *Sunshine State Teaching and Learning Conference (SSTLC)* for professional development in evidence-based teaching practices, Orlando, FL, January 2026.

C. Course Enhancement and Development

Computer Organization and Design. **Summer 2022-Spring 2023**
Course Content Development. *University of Central Florida*

- Supported implementation of using Canvas add-ons, including UCF Here for measuring student attendance
- Resolved technical complexities for course migration from Classic to New quiz format
- Utilized python scripts leveraging Canvas REST API for downloading student and validating student grades
- Developed scripts for automatically anonymizing student quiz submissions to adhere to FERPA-cognizant approaches in remediation

IX. Professional Service

A. Board Memberships

- **Board Member**, *Computational Social Science Society of the Americas (CSSSA), 2025 – Present*
  - Student Ambassador, and in charge of EasyChair for conference

B. Session Chair Assignment

- **Session Chair**, *Technical Session 2D: Hardware Security I*, Great Lakes Symposium on VLSI (GLSVLSI), 2026
- **Session Chair**, *T4-RBA K-12 Education & Outreach 4: Integrating Innovative Technologies and Interdisciplinary Approaches*, IEEE Frontiers in Education (FIE) Conference, 2025

C. Conference Leadership and Outreach

- **Panelist,** *ECE Students and AI: Current vs. Future Outlooks for Our Learners*, Microelectronics Systems Education Workshop co-located at Great Lakes Symposium on VLSI (GLSVLSI), 2026
- **SIG Sponsor & host,** *CSSSA Presents: Graduate and Early-Career Outreach & Technical Communication Special Interest Group (SIG)*, Computational Social Science Society of the Americas (CSSSA) Annual Conference, 2025

D. Technical Paper Reviewer/Referee

- Education Reviewer for *ASEE National Conference* 2026 Computers in Education Division (COED)
- Education Reviewer for *ASEE National Conference* 2026 NSF Grantees Poster Session
- Technical Paper Sub-Reviewer for the 2025 *Great Lakes Symposium on VLSI (GLSVLSI)* Microelectronic Systems Education Workshop
- Education Reviewer for *ASEE National Conference* 2025 Computers in Education Division (COED)
- Technical Abstract Reviewer for *ASEE National Conference* 2025 NSF Grantees Poster Session
- Technical Paper Reviewer for ACM *Winter Simulation Conference* 2024 Education Track.

E. Membership and Leadership of Student Organizations

- *Student Laureates of STEM Teaching and Learning (SLSTL),* Vice President of Registered Student Organization at the University of Central Florida, Fall 2023 - Present.
- *Computer Hardware Innovation and Design Association (CHIDA),* President of Registered Student Organization at the University of Central Florida, Fall 2023 - Present.

F. Professional Society Memberships

- *Institute of Electrical and Electronics Engineers (IEEE)* Student Member, Fall 2024 - present
- *American Society of Engineering Education (ASEE)* Student Member, Fall 2024 - present
- *Computational Social Science Society of the Americas (CSSSA)* Student Member, Fall 2024-present

X. Certificates

- *Youth Protection Training Certificate,* University of Central Florida, University Compliance, Ethics, and Risk for completion of Youth Protection Training on May 3, 2026
- CITI program - *Human Subjects Research- Group 2.Social / Behavioral Research Investigators and Key Personnel*, Sep 2025 - Sep 2028
- IDS 6513 *Preparing Tomorrow's Faculty* Higher Education Teaching Program, Fall 2024
- AI Fundamentals for Faculty Members - UCF Faculty Center for Teaching and Learning, Summer 2025

XI. Technical and Language Skills

SonicWall accredited sales engineer and support engineer ▪Familiar with programming the TI-RSLK ▪ Wireshark (Static / Live Analysis) ▪ Machine Learning applications ▪ SQL Server ▪ Linux Ubuntu/Kali ▪ CVAT ▪ PyTorch ▪ NVIDIA Jetson Nano image classification toolsets ▪ REST API ▪Vitis-HLS

Programming Languages:
C, C++, Verilog, Assembly, Python, MATLAB, HTML, XML, Java, MIPS Assembly language, Swift

Spoken Languages:
English (Native), Italian (Fluent), Spanish (Familiarized)

XII. Graduate Courses Completed

University of Central Florida

- CDA5106: Advanced Computer Architecture — Spring 2021
- COP5611: Operating Design Principles — Spring 2021
- COT5405: Design & Analysis of Algorithms — Spring 2022
- EEL6812: Intro to Neural Networks — Spring 2022
- EIN6258: Human-Computer Interaction — Fall 2022
- EEL5862: Real-Time Systems — Fall 2022
- EEL6762: Performance Analysis of Computer & Communication Systems — Spring 2023
- CAP6675: Complex Adaptive Systems — Fall 2023
- EEL5722: Field Programmable Gate Array (FPGA) — Fall 2023

- EEL5706: Resilient Computer System Design — Spring 2024
- ESI6535: Advanced Agent-Based Modeling — Spring 2024
- EME6613: Instructional System Design — Summer 2024
- EEL6938: Professional Communications for Engineers — Fall 2024

University of Florida (Traveling Scholar)

- CAP5610: Machine Learning — Summer 2022