

TREVOR T. SPINOSA

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Computer science educator and digital forensics researcher. Instructor of record for CSC 3200, Ethics in Computing, since Spring 2025; Ph.D. expected May 2027. Teaching interests include introductory programming, data structures, security, and computing ethics.

TEACHING EXPERIENCE

Instructor of Record, CSC 3200 Ethics in Computing

Spring 2025 - Present

Louisiana State University, Division of Computer Science & Engineering

- Developed my own version of this required course: syllabus, slides, Moodle site, discussion prompts, quizzes, essay criteria, and online test. Fall 2026 is my fourth semester; approximately 400 students taught since Spring 2025.
- Teach ethical theory, professional codes, intellectual property, privacy, AI, and security through computing cases, discussion, and written analysis. The course is required in the Software Engineering and Cybersecurity concentrations.
- Grade essays by hand using five posted criteria. After a classroom activity exposed a quiz ceiling effect, began replacing recall items with scenarios in Spring 2026.
- Prepared the Fall 2025 ABET Student Outcome 4 assessment on professional and ethical responsibility. Added a case from my co-authored Progressive Snapshot research to the privacy unit in Spring 2026.

Teaching Assistant, MATH 1552 Calculus II

Fall 2023

Louisiana State University, Department of Mathematics

Graded course examinations for approximately 50 students.

EDUCATION

Ph.D., Computer Science

August 2025 - May 2027 (expected)

Louisiana State University

Advisor: Dr. Ibrahim Baggili. Dissertation area: forensics and security of consumer, mobile, cloud, and AI systems.

M.S., Computer Science

August 2023 - May 2025

Louisiana State University

Focus: cybersecurity and digital forensics. Selected coursework: algorithm design and analysis, machine learning, advanced operating systems, and software security.

B.S., Computer Science

August 2019 - May 2023

Louisiana State University

Software Engineering concentration; minor in Mathematics. President's Honor Roll (Fall 2019); Dean's List (Fall 2021, Spring 2023).

COURSES PREPARED TO TEACH

Ready now: Ethics in Computing / Computers and Society; CS1 and CS2 (Python or Java); Data Structures and Algorithms; Digital Forensics; Computer Security. Preparation combines course ownership, graduate algorithms coursework, a mathematics minor, software projects, and published forensics research.

With one term of preparation: Introduction to Machine Learning; Software Engineering and Software Testing; Web and Mobile Development.

Proposed elective: *Forensics of AI Systems*, on evidence recovery and validation in AI companion applications and agent runtimes.

Teaching portfolio: course materials overview, a prepared CS1 lesson, and a proposed CS2 assignment. Programming courses and the elective are prospective teaching.

PRESENTATION

T. Spinosa, I. Baggili, and A. Webb. "Don't You, Forget About Ethics: Using AI Music Generation to Promote Student Learning and Engagement." IEEE Integrated STEM Education Conference (ISEC), March 2026. Presented virtually by Trevor Spinosa.

RESEARCH EXPERIENCE

Graduate Researcher, Baggil(i) Truth Lab (BiT Lab)

August 2023 - Present

Louisiana State University; director Dr. Ibrahim Baggili

Recover and analyze evidence from consumer, mobile, cloud, and AI systems. Four peer-reviewed publications, including one first-author paper; three released tools, one co-developed.

PEER-REVIEWED PUBLICATIONS

1. A. Satter, M. Salmon, L. Muhanna, **T. T. Spinosa**, T. Gharaibeh, and I. Baggili. "With or without logs: Memory forensic reconstruction of Model Context Protocol (MCP) activity in agentic LLM systems." *Forensic Science International: Digital Investigation*, 57, 302130, 2026. DFRWS USA 2026.
Contribution: ran experiments; oversaw and wrote portions of the paper.
2. K. J. Comeaux, **T. T. Spinosa**, A. Ghosn, and I. Baggili. "Ex Machina: A forensic evaluation of AI companion applications and their evidentiary value." *Forensic Science International: Digital Investigation*, 56, 302050, 2026. DFRWS EU 2026.
Contribution: built the tool that profiles a user from recovered device artifacts.
3. **T. Spinosa**, A. Onik, J. Rovira, and I. Baggili. "Money on My Mind: Forensic Investigation of Venmo Payment App." *International Conference on Availability, Reliability and Security (ARES)*, WSDf workshop, pp. 60-77, 2025.
First author; developed PyMent for transaction-history recovery and authentication analysis.
4. A. R. Onik, **T. T. Spinosa**, A. M. Asad, and I. Baggili. "Hit and run: Forensic vehicle event reconstruction through driver-based cloud data from Progressive's Snapshot application." *Forensic Science International: Digital Investigation*, 49, 301762, 2024. DFRWS USA 2024.
Contribution: co-developed PyShot for recovery of cloud driving artifacts.

RESEARCH SOFTWARE

- **PyMent** (Python): recovers Venmo transaction histories through API traffic and session tokens; supports analysis of MFA-bypass pathways.
- **CharacterAIRecovery** (Python): recovers Character.AI messages using a session token.
- **PyShot** (Python, Flask): recovers Progressive Snapshot driving, speed, and location data. Co-developed; released under A. R. Onik's account.

PROFESSIONAL EXPERIENCE

Clean Cities University Intern

Summer 2023

Louisiana Clean Fuels

Built analysis workflows for statewide fuel-usage datasets; cleaned and transformed data for stakeholder use.

SELECTED TECHNICAL SKILLS

Programming: Python, Java, C++, JavaScript, SQL.

Forensics: network traffic inspection, logical acquisition, memory forensics, mobile and cloud artifact analysis.

Tools: Git, Linux, Flask, React.js, Flutter, JUnit, NumPy, pandas, PyTorch, TensorFlow.

REFERENCES

Dr. Ibrahim Baggili, Ph.D. advisor; Division Chair and Roger Richardson Professor, LSU Computer Science & Engineering. ibaggili@lsu.edu

Dr. Andrew M. Webb, Assistant Professor, LSU Computer Science & Engineering. andrewwebb@lsu.edu

Dr. James Ghawaly Jr., Assistant Professor, LSU Computer Science & Engineering and Center for Computation & Technology. jghawaly@lsu.edu