# Diego Guzman

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#### EDUCATION

**Emory University** 

Atlanta, GA

Ph.D. in Computer Science and Informatics

Aug. 2025 – Expected May 2030

University of California, Irvine

Irvine. CA

Bachelor of Science in Informatics

Minor in Information and Computer Sciences

Sep. 2021 - Jun. 2025

## Research Experience

# Undergraduate Researcher

Jun. 2023 – Jun. 2025

University of California, Irvine

Irvine, CA

STAR Lab

Advisors: Dr. Armando Beltran, Dr. Franceli Cibrian, and Dr. Gillian Hayes

- Analyzing qualitative data from smartwatch user studies to uncover recurring themes and gain actionable insights
- Designing and developed interactive Streamlit dashboards to visualize clusters of 109 distinct themes in order to highlight key contextual and semantic relationships
- Leveraging GPT-3.5's API to automate and refine the extraction of contextually relevant themes from user studies and feedback

# Undergraduate Research Intern

Jun. 2024 - Aug. 2024

University of California, Berkeley

Berkeley, CA

EPIC Data Lab

Advisors: Dr. Yiming Lin and Dr. Aditya Parameswaran

- Developed an information retrieval system to capture key values (e.g., dates and case IDs) across 490 legal documents totaling 32,849 pages
- Implemented a semantic search-based clustering approach to group legal documents by contextual similarity
- Built interactive user interfaces with React.js and TypeScript to visually present comprehensive document analytics for various stakeholders (e.g., journalists and legal professionals)

#### Teaching Experience

Reader Mar. 2025 – Jun. 2025

University of California, Irvine

Irvine, CA

Course: Information Visualization

- Taught information visualization techniques for approximately 50 students through regular office hours
- Provided grading support and feedback on student assignments
- Collaborated on continuous updates and enhancements to course materials

## Learning Assistant

Jan. 2023 - Mar. 2023, Mar. 2024 - Jun. 2024, & Mar. 2025 - Jun. 2025

University of California, Irvine

Irvine, CA

Course: Programming with Software Libraries

- Taught Python programming concepts to a cumulative total of 85 undergraduate students across 3 quarters, most of whom were freshmen and sophomores with little to no prior programming experience
- Assisted undergraduate students with the debugging of their Python programs
- Aided undergraduate students in learning how to use Git

#### Learning Assistant

Sep. 2023 – Dec. 2023

University of California, Irvine

Irvine, CA

Course: Programming with Software Libraries Accelerated

- Taught Python programming concepts to 50 undergraduate students that were primarily third year transfers and freshmen with prior programming experience
- Assisted undergraduate students with the debugging of their Python programs
- Helped undergraduate students transition from their prior programming experiences in languages such as Java and JavaScript to Python

# PEER-REVIEWED PUBLICATIONS

[C1] Beltran Verdugo, J., Mofid, H., Parikh, H., Gondaliya, J., Guzman, D., Shah, J., Escobedo, L., & Cibrian, F. (in press). Exploring Manifold-Based Clustering Techniques for Enhanced Inductive Thematic Analysis. Proceedings of the 1<sup>st</sup> International Conference on Software Engineering of Emerging Technologies (SEET 2025).

# Conference and Symposium Presentations

- [P4] Eunsang, P., Cibirian, A., Guzman, D., Cibrian, F., Beltran, J., & Hayes, G. (2024). Reinforcement Learning from Human Feedback for Thematic Analysis. *University of California, Irvine Summer Undergraduate Research Fellowship Symposium*.
- [P3] Guzman, D., Lin, Y., & Parameswaran, A. (2024). Document Clustering of Police Records: Enhancing Transparency and Accessibility. *University of California, Berkeley Summer Undergraduate Research Fellowship Symposium*.
- [P2] Guzman, D., George, M., Beltran, J., Cibrian, F., & Hayes, G. (2024). Using Large Language Models to Augment Reflective Thematic Analysis for Semi-Structured Interviews. *National Conference on Undergraduate Research*.
- [P1] Guzman, D., Beltran, J., Cibrian, F., & Hayes, G. (2023). How Can ChatGPT Be Used as a Tool in Qualitative Analysis. *University of California, Irvine Summer Undergraduate Research Fellowship Symposium*.

## Professional Organizations

AccessComputing - Student Member

Feb. 2025 – Present

## Awards, Grants, and Distinctions

University of California Leadership Excellence Through Advanced Degrees Fellowship

Jun. 2023 – May. 2025

Awarded: \$8,000 (in total)

2023 UC Irvine Information and Computer Sciences Diversity Conference Scholarship

Aug. 2023

UC Irvine Chancellor's Excellence Scholarship

Sep. 2021 - Jun. 2023

## TECHNICAL SKILLS

Languages: C++, Python, Java, TypeScript, JavaScript, HTML, CSS, Sass

Frameworks & Environments: React.js, React Native, Node.js, Angular, Streamlit, Vega-Lite, Ionic, Java Swing

Database Systems: MongoDB, Firebase, MySQL

Developer Tools: Git, Visual Studio Code, Arduino, PyCharm, IntelliJ, Eclipse, IATEX