

Nathalia Gomez

PhD CANDIDATE · COMPUTER SCIENCE (HCI)

Drexel University, Philadelphia, PA, USA

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Education

Drexel University

PH.D. COMPUTER SCIENCE

Philadelphia, PA

2025 - 2030

- Advisor: Dr. Tiffany D. Do

Drexel University

B.S. Digital Media and Virtual Production

Philadelphia, PA

2020 - 2025

- Minor in Computer Science, Minor in Virtual Reality and Immersive Media

Research Appointments

2025 - **Graduate Research Assistant**, Drexel University

2024-2025 **Undergraduate Research Intern**, Drexel University

Publications

- Google Scholar Profile: <https://scholar.google.com/citations?user=9CjRAX8AAAAJ&hl>

CONFERENCE PROCEEDINGS

1. **Nathalia Gomez**, S. Sue Batham, Matias Volonte, and Tiffany D. Do (2025). "Virtual Interviewers, Real Results: Exploring AI-Driven Mock Technical Interviews on Student Readiness and Confidence." In Companion Publication of the 2025 Conference on Computer-Supported Cooperative Work and Social Computing (CSCW Companion '25), pp. 1-5. <https://doi.org/10.1145/3715070.3749227>
Acceptance Rate: 28%
2. Daniel Schwartz, Lev A Saunders, **Nathalia Gomez**, Yusuf Osmanlioglu, Richard Vallett, Genevieve Dion, Ali Shokoufandeh (2025). "Minimalist Neural Networks for Gesture Recognition on Wearable Capacitive Touch Textiles With Comparative User Study." In Proceedings of the 2025 ACM Symposium on Spatial User Interaction (pp. 1-11). ACM. <https://doi.org/10.1145/3694907.3765936>
Acceptance Rate: 31%

Professional Experience

Drexel University's College of Computing and Informatics

Philadelphia, PA

RESEARCH ASSISTANT

Oct 2024 - Sep 2025

- Developed interactive simulations and games in Unity optimized for wearable textile touch sensors to showcase sensor efficiency and versatility compared to traditional controllers.
- Established methodologies for data collection and analysis to evaluate user learning curves and efficiency metrics, tailoring insights to improve device usability.
- Collected extensive sensor data to train deep-learning models for achieving optimal sensitivity and accuracy, ensuring precise player control and a seamless user experience.

Xtatic Thought

Philadelphia, PA

VIRTUAL REALITY DEVELOPER

Dec 2022 - Mar 2023

- Engineered a high-immersion VR tool using Unity and Oculus Integration Pack, integrating advanced hand-tracking, audio recording, virtual keyboard, and virtual drawing pad features.
- Ensured rapid project progression by establishing measurable goals, optimizing workflow, and tracking deliverables.

Jitsik LLC*Philadelphia, PA***VIRTUAL REALITY DEVELOPMENT INTERN***Sep 2022 - Mar 2023*

- Designed a custom data extraction tool to capture user session metrics, producing reports for performance analysis.
- Incorporated passthrough into the VR Application for the Meta Quest 2 and Meta Quest Pro devices
- Created high-fidelity 3D environments optimized for VR, balancing detail and performance

Awards, Fellowships, & Grants

2025 **Transforming Tech Scholarship**, Drexel University2020 - 2025 **Drexel Global Scholars (Full scholarship)**, Drexel University

\$205,558

2024 **Museum Innovation Fund**, Academy of Natural Sciences