Rocio Perales Valdes

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Education

Georgia Institute of Technology | Computer Science | GPA: 4.0

May 2028

Minor: Law, Science & Technology | Coursework: Data Structures, OOP, Linear Algebra Involvements: AISI, RoboJackets, Kappa Alpha Theta, SHPE, Women@CollegeOfComputing

Skills

Programming: Java, C++, Python, JavaScript, Web (HTML, CSS)

AI/ML: TensorFlow, YOLO, Autoencoders

Robotics: ROS2, PID Control

OS: MacOS, Linux Tools: Git, GitHub, ClickUp Languages: Spanish (Native), English, French

Experience

Executive Board | AI Safety Initiative (AISI.dev)

Jan. 2025 - Present

- Facilitating AI Safety Technical Fellowship a 6-week technical introduction into AI Safety
- Secured 80 new members at club fair, interviewing stakeholders, and creating LinkedIn content twice a month
- Leading deepfake regulation research team including graduate students under Dr. Margaret Kosal

Software Developer | RoboJackets - RoboCup SSL

Aug. 2024 – Present

- Developed obstacle avoidance algorithms in C++/Linux/ROS2 for 6-robot coordination system
- Led technical challenge implementation resulting in 2nd place Technical Challenge, 4th overall at RoboCup 2025 International
- Contributed to large-scale robotics codebase with real-time multi-robot pathfinding

ML Solutions Intern | ZeruDrones

Jun. 2025 - Present

- Trained YOLO models on AWS-based VM with enhanced GPU for electrical infrastructure detection
- Integrated convolutional autoencoders for powerline anomaly detection preventing service interruptions

Campus Leader | You.com

Oct. 2024 - May 2025

- Organized AI agents workshop for 40+ students from Georgia Tech, Yale, Columbia, NYU
- Collaborated with cross-functional teams on AI product development and campus outreach strategies

Projects

Personalized Word Count for Google Docs

Jun. 2024 - Aug. 2024

- Built JavaScript Google Workspace extension enabling custom word count tracking with user-defined parameters
- Achieved 1,000+ downloads on Google Workspace Marketplace with live document integration

Denoising Autoencoders Research

Sept. 2022 - Oct. 2024

• Reduced MSE by 15% on MNIST dataset, published technical paper on handwritten digit deblurring

Awards & Recognition

Economic Futures Symposium | Invited Guest

September 2025

 Invited by Anthropic to attend exclusive symposium based on deepfake regulation research contributions AI@ATL Hackathon Winner | Major League Hacking Oct. 2024

- Built synthetic medical dataset generator and prompt injection testing framework in 48 hours
- Evaluated LLM robustness across multiple attack vectors using Claude and Gemini APIs
- Won 1st place out of 15 teams in AI Safety track with live technical demonstration

Machine Learning Specialization | DeepLearning.AI/Stanford

Jun. 2023 - Aug. 2023

• Completed 15+ coding assignments in PyTorch/NumPy (self-adapted from TensorFlow)

AI & Law (Honors) | Lund University

Apr. 2022