

VALENTINA TORRES DA SILVA

valentinatsilva@proton.me | [LinkedIn](#) | [GitHub](#) | [Portfolio](#) | New York City, NY

EDUCATION

Fairleigh Dickinson University

Bachelor of Science in Computer Science, Minor in Mathematics, GPA: 3.96

Teaneck, New Jersey

Anticipated May 2026

TECHNICAL STACK

Programming Languages: Python, R, Java, JavaScript, Bash

Frameworks & Libraries: Scikit-Learn, TensorFlow, PyTorch, Next.js, TailwindCSS, FastAPI, Pandas, NumPy, Matplotlib, Seaborn

Databases & Cloud Platforms: AWS (SageMaker, Lambda, API Gateway, CloudWatch, S3), SQL, PostgreSQL (via Supabase)

Data Skills: NLP, Supervised/Unsupervised Machine Learning, Retrieval-Augmented Generation (RAG), Ensemble Models, Tableau

Software Development/Testing: API Integration, Model Validation/Deployment, Performance Benchmarks

Version Control, DevOps & CI/CD: Docker, Linux, VS Code, Cursor, GitHub Copilot, Git

Languages: English, Spanish, Portuguese

WORK EXPERIENCE

Fairleigh Dickinson University

Researcher

Teaneck, New Jersey

December 2025 - Present

- Developing a Landsat-VIIRS pipeline to estimate sub-pixel water fractions and retain narrow-river features in satellite imagery.
- Training** multispectral models to distinguish open from ice-covered river water for climate-driven hydrologic monitoring.

Women in Data Science (WiDS) Worldwide

Data Scientist

Remote

September 2025 - Present

- Developed an interactive data science [notebook](#) integrating CDC's Social Vulnerability Index via API to support WiDS.
- Engineered and launched** the [2026 WiDS Global Datathon](#) on wildfire risk, developing survival-analysis targets and robust evaluation metrics to support equitable, decision-relevant disaster response modeling.
- Designed and led** a [workshop in Baghdad](#), Iraq to **mentor** young women on building end-to-end data science projects, **expanding** access to AI education in underrepresented regions.
- Conducting** active research for the 2027 WiDS Global and University Datathons to **evaluate** globally relevant datasets, including misinformation trends and water usage, **informing** challenge design for a diverse international demographic.

Fairleigh Dickinson University

Computer & Robotics Lab Assistant

Teaneck, New Jersey

August 2023 - Present

- Improved NAO humanoid AI robot task accuracy by configuring custom Python scripts for multi-step automation workflows.

PROJECTS

[Long Run](#) | *Battle of the Brains "Best Technology Solution" Winner* | Team Leader

October 2024

- Secured 3rd place out of 20+ teams** by delivering a high-performance React.js + Next.js platform in 16 hours, optimizing client-side routing to reduce load times by 35% and improve user engagement.
- Led** 3-member team to build a multi-page event platform with video, scheduling, and eco-materials features.

[RAG-Enabled AI-Powered Legal Contract Data Extraction](#) | FDU + RSG Media/ Rightsline

August 2024 - November 2024

- Cut legal contract **review time by 70%** by developing a Retrieval-Augmented Generation (RAG) application that automated context-aware data extraction and accelerated content generation.
- Built a FastAPI back end with PostgreSQL (via Supabase) to deliver near-real-time query results, **reducing retrieval latency by 65%** and improving data accessibility for stakeholders.

[Detection of AI-Generated Social Bots on Twitter](#)

April 2025- May 2025

- Designed an end-to-end pipeline across classical ML, deep learning, and clustering: preprocessing (**English-tweet filtering** $\geq 70\%$, **normalization**), feature engineering (URL/hashtag/mention counts, profile signals, account age, friends-to-followers), scaling, and consistent splits (70/15/15 for DL; 80/20 for ML).
- Benchmarked KNN (0.86), Logistic Regression (0.87), SVM (0.87), Random Forest (0.86), Bi-LSTM (0.87), and PCA+KMeans clustering (0.88), confirming DL outperformed classical ML on precision/recall/F1.

COMPETITIONS & DATATHON

Bryan Muñoz, María Cruz, **Valentina Torres da Silva**, Yao Yan, Gabe Schine, WiDS Worldwide, and WatchDuty . WiDS Global Datathon 2026. https://kaggle.com/competitions/WiDSWorldWide_GlobalDathon26, 2026. Kaggle.

AWARDS

eBay Innovation Scholarship – \$5,000 | Mar 2024