

Emmanuella Adams

Creative Technologist Building Geospatial AI & NLP Systems for Frontier Markets

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Technical & Research Skills

- **Research & Analysis:** Computational Text Analysis, Metric Design, Geospatial Benchmarking, Narrative Evaluation
 - **Engineering:** ML Pipeline Development (TensorFlow, PyTorch), Data Preprocessing, Cloud Deployment (GCP), Model Evaluation
 - **Tools:** Python, Git, Docker, Jupyter, Linux
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Research Projects

The Architects of Africa's Digital Economy: A Chronological Analysis of Women in African Technology – AI-assisted Research

Report Link: <https://bit.ly/48CL3w7>

- Investigated African women's historical impact in technology using NLP on 30 years of archival and digital sources. Systematized data collection; applied computational text analysis to identify thematic shifts.
- **Finding:** Transition from individual advocacy to systemic community-building post-2010; documented in structured visual reports.

StoryOracle – NLP-Powered Narrative Quality Analyzer

GitHub Link: <https://github.com/Emmanuella-Adams/storyoracle-nlp>

- Explored alignment between computational metrics and human literary judgment by fine-tuning DistilBERT on curated short fiction made by me. Designed evaluation metrics for sentiment and readability; compared outputs against human annotators.
- **Result:** Achieved 85% agreement with human judgment, establishing a quantitative framework for narrative analysis.

UrbanEye – Building Footprint Detection for Urban Planning

GitHub Link: <https://github.com/Emmanuella-Adams/urbaneye-ml>

- Benchmarked U-Net for low-resolution building segmentation in arid regions, engineering custom augmentations for dust and shadow artifacts. Preprocessed and augmented Kenya GeoJSON dataset to improve model robustness.
 - **Achieved 75% IoU**, establishing a baseline for scalable geospatial analysis in data-scarce environments.
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Experience

Content Writer Intern – 1999 Ideas Concepts Innovations & Creations (Sep 2025 –Present)

- Synthesized complex technical and research findings into clear, communicable narratives, developing skills in research dissemination. Integrated AI-assisted analysis into creative outputs, connecting technical results with human-readable insights.

Software Developer – Google Developer Group (GDG)

- Contributed to full-stack campus event systems; debugged code and guided participants through technical challenges. Developed transferable skills in collaborative engineering, documentation, and solution-oriented design.
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Education

B.Sc. Software Engineering | Federal University Dutse | Expected 2027

Relevant coursework: Machine Learning, NLP, Distributed Systems, Research Methodology