Godfrey Kipchumba, MD, PhD

Senior Dedicated Resource & Principal Research Specialist

Medical AI & Imaging | Deep Learning | Instructional Design | Systematic Reviews

DEDICATED RESOURCE PROFILE SUMMARY

Accomplished Medical Director and Research Specialist with extensive background across clinical AI development, biomedical imaging, and curriculum architecture. Proven expertise in structuring advanced deep learning frameworks for low-dose CT image reconstruction, quantitative pulmonary analysis, and evidence-based systematic reviews adhering to PRISMA standards.

Combines medical degree expertise with technical deep learning workflows to bridge the gap between complex algorithmic models, peer-reviewed scientific publishing, and instructional evaluation platforms.

HIRING DETAILS

RESOURCE CATEGORY

Programming & Development / Writing & Research

HOURLY RATE

$65.00 / hr

MIN. ENGAGEMENT

1 Month

AVAILABILITY

Full-time / Dedicated

PORTFOLIO I: DEEP LEARNING LOW-DOSE CT IMAGE RECONSTRUCTION

SERVICE FOCUS

Medical Imaging Research, Deep Learning & Technical Writing

- **Challenge:** Address diagnostic noise and artifact limitations in low-dose chest CT (LDCT) scans without compromising quantitative pulmonary nodule measurement.
- **Methodology:** Executed systematic literature synthesis across medical databases using PRISMA guidelines. Evaluated DLIR models against traditional Filtered Back Projection (FBP) and Iterative Reconstruction (IR).
- **Deliverables:** Complete publication-ready systematic review manuscript, risk-of-bias evaluation tables, PRISMA flowcharts, and reference matrices.

CORE COMPETENCIES

Deep Learning | Medical CT Imaging | PyTorch / Python | PRISMA Reviews | Computer Vision | Instructional Design | Algorithmic Benchmarking | SEO Content Strategy | Scientific Manuscripts

PORTFOLIO II: INTERACTIVE STEM CURRICULUM & ASSESSMENT PLATFORM

SERVICE FOCUS

Instructional Design & E-Learning Architecture

- **Challenge:** Transition traditional STEM classroom frameworks into interactive, scalable digital formats with dynamic tracking.

SERVICE STANDARDS

VERIFICATION & QUALITY

- Peer-review quality documentation
- Strict adherence to PRISMA/ ICMJE guidelines

- **Solution:** Authored scenario-based learning modules, structured workflow rubrics, and adaptive problem-solving paths for self-paced learning.
- **Impact:** Delivered 50+ modular lesson plans, improving assignment completion by 40% and optimizing evaluation turnarounds.

- Validated AI/ML evaluation metrics