

# JESUTOFUNMI A. OMIYE

EMAIL: TOMIYE@STANFORD.EDU

## EDUCATION

---

Stanford University, Stanford, CA, USA Sep 2021 – Jun 2023

**MS in Health Policy (on Artificial Intelligence specialization track)**

- Courses included: Data-driven medicine, Outcomes analysis, Deep learning for computer vision, Modern applied statistical learning
- HAI-Google Grant, 2023 (Awarded \$15,000 for research on AI for skin cancer detection), Threshold Venture Fellow (1 of only 12 students at Stanford), University Student Health Committee

University of Ibadan, Ibadan, Nigeria

**MB; BS in Medicine and Surgery (M.D. equivalent)**

Jan 2013 – Nov 2019

- Federal Government of Nigeria Scholar, Total Scholar, New Venture Fund \$50,000 grant, UIMSA Outstanding Personality award

## RESEARCH EXPERIENCE

---

**Postdoctoral Scholar**, Depts. of Dermatology/Biomedical Data Science, Stanford University, Stanford, CA, USA Aug 2023 – Pres

*Co-advised by Drs Lisa Zaba and Roxana Daneshjou*

- Building AI models to identify skin diseases, while evaluating the potential biases of language models
- Designing automated tools to differentiate benign from malignant melanocytic lesions in confocal microscopy images
- Collaborating on policy papers to promote inclusive AI implementation
- Original papers in Nature Digital Medicine and under revision in Nature Medicine; Media features in the Washington Post and AP

**Research Assistant**, Translational AI in Dermatology Group, Stanford University, Stanford, CA, USA

Jul 2022 – Jul 2023

- Co-led the development of AI/analytics infrastructure and evaluated AI models for skin diagnosis
- Developed and refined AI models for early detection, and diagnosis of common skin conditions, leveraging carefully curated dermatological datasets
- Contributed to collaborative research projects, culminating in manuscripts and presentations showcasing the potential of AI to increase access and improve the quality of healthcare

**Research Assistant**, Ross Lab, Stanford University School of Medicine, Stanford, CA, USA

Jul 2021 – Jul 2023

- Developed clinical models to bridge the gap between the design and implementation of personalized medicine
- Built computer vision and statistical models on ~4.5K records using electronic health records, genetics, and imaging data to predict outcomes of patients with peripheral artery disease
- Established an industry partnership with an AI company and co-authored Wiley book chapter on AI in Surgery

**Graduate Researcher**, Stanford Centre for Biomedical Informatics Research, Stanford, CA, USA

Jul 2020 – May 2021

- Mentored 4 students and analyzed publicly available Covid-19 data to evaluate the impact of reopening orders on Covid-19 hospitalizations in all 50 states in the US
- Co-authored 3 peer review articles across AI in healthcare and population health, and featured in Stanford Medicine 2021 report
- Delivered an oral presentation of the paper at the American Medical Informatics Association (AMIA) 2021 Summit

## PROFESSIONAL EXPERIENCE

---

**Summer Associate**, Valia Ventures, San Francisco, CA, USA

Jul 2022 – Apr 2023

- Sourced multiple startups for investment in the healthcare, AI/ML, and deep tech sectors
- Performed due diligence, developed investment memos, and advised portfolio companies
- Investments include Enter Health (Series A), Monogram Orthopedics (Series A)

**Senior House Physician**, St. Nicholas Hospital, Lagos, Nigeria

Jan 2020 – Jan 2021

- Managed over 750 patients in the medical, obstetrics & gynecology, pediatrics, and surgical wards
- Assisted in about 35 operative procedures including vascular surgeries, mastectomies, urological, and general surgical procedures
- Conducted 2 research projects, monthly clinical audits, and data-backed insights on COVID-19 in Africa with 3 press features

**Sub-Intern**, Neurosurgery, Northwestern Medicine, Chicago, IL, USA

Sep – Oct 2018

- Participated in the surgical & multi-disciplinary management of neurosurgical patients including complex operative procedures like tumor excisions, spinal, and deep brain stimulation
- Conducted capstone project on recurrent spinal tumor that was graded 100%
- Awarded highest marks on overall assessment criteria that included ethics, communication, problem-solving approach, and teamwork

# JESUTOFUNMI A. OMIYE

EMAIL: TOMIYE@STANFORD.EDU

- Chairperson**, 32nd African Medical Students' Associations General Assembly, Ibadan, Nigeria Sep 2017 – Aug 2019
- Conceived and led the strategic vision and organization of a successful pan-African conference on Repositioning Healthcare in Africa for Sustainable Development which brought 600 students and 30 speakers from 13 countries, in partnership with Johnson & Johnson, Bill & Melinda Gates Foundation, and WHO amongst others (<http://famsaga2018.com/>)
  - Raised and managed funds of \$80,000 for project execution
  - Received an official commendation from the WHO-Africa Director

## LEADERSHIP EXPERIENCE

- Co-lead, Finance & Sponsorships | Blockchain**, Stanford Africa Business Forum, Stanford, CA, USA Dec 2021 – Apr 2022
- Spearheaded the efforts of a 6 person team to raise and co-manage a budget of \$85,000 for this event
  - Coordinated the recruitment of a diverse set of speakers for the conference's first ever blockchain panel
- Co-founder & Co-chair**, The Ganglion Initiative, Nigeria May 2017 – Present
- Co-developed the blueprint for a flagship synapse project that involves coordinated career, entrepreneurship, leadership, and opportunities sessions delivered to high school students across Nigeria. (<https://theganglioninitiative.org/>)
  - Mobilized a team of 100 volunteers and raised ~\$5,000 to deliver training sessions to 8,000 students across Nigeria
- President | Board Secretary**, The ACE5 Initiative, University of Ibadan, Nigeria Nov 2016 – Present
- Managed monthly orphanage visits and facilitated an annual Spelling Bee to provide scholarships to orphaned children
  - Developed a new fund-raising model for the initiative by engaging media tools and partnering with the State Governor and local firms.
  - Expanded beneficiary program with improved model from 60 to 250 children and grew scholarship funding by 30%

## SELECTED PUBLICATIONS & PRESENTATIONS

### Publications

- **Omiye JA**, Gui H, et al. Principles and applications of artificial intelligence in dermatology. *Frontiers in Medicine*, 10 (2023)
- **Omiye JA**, Lester J, Spichak S, Rotemberg V, Daneshjou R. Beyond the hype: large language models propagate race-based medicine *npj Digit. Med.* 6, 195 (2023)
- **Omiye JA**, Ghanzouri I, Lopez I, et al. Clinical use of polygenic risk scores for detection of peripheral artery disease and cardiovascular events. *PLOS One*, 2023 [In review].
- Amal S, Safarnejad L, **Omiye JA**, Ghanzouri I, et al. Use of multi-modal data and machine learning to improve cardiovascular disease care. *Front Cardiovasc Med.* 2022 Apr 27;9:840262. doi: 10.3389/fcvm.2022.840262.

### Presentations

- “Generative AI in Healthcare with an African Focus.” The 6<sup>th</sup> West African-Taiwan Health Promotion Conference. Nov 2023 (**Invited talk**)
- “On the promise of AI in Dermatology.” San Francisco Dermatology Society. Aug 2023 (**Invited talk**)
- “Generative AI and LLMs in Medicine.” Stanford Department of Dermatology Grand Rounds. Aug 2023 (**Invited talk**)
- “The Landscape of Medical Research in Africa.” The World Pre-Health Conference. Mar 2021 (**Invited talk**)

## SELECTED COMMUNITY SERVICE & VOLUNTEER WORK

- Peer Reviewer, The Stanford Journal of Science, Technology, and Society 2022 – Pres
- Home Program Representative (HPR), Stanford Bioscience Student Association 2021 – 2023
- Volunteer Student Clinician, Community Health Outreaches 2015 – 2019

## SELECTED MEDIA FEATURE

- Akindele, B. (2021). “Living with Long Covid in Lagos.” *Mail & Guardian* (<https://mg.co.za/africa/2021-02-28-living-with-long-covid-in-lagos/>).

## SKILLS & HOBBIES

- Technical** Python, R, PyTorch, Tensorflow, and Stata.
- Hobbies** Soccer, Tennis, and Afrobeats