

Collins Opoku-Baah

Phone: +1 615 574 2649
City/State/Country: Nashville, TN, USA

Email: copokubaah@gmail.com
Linkedin: <https://www.linkedin.com/in/collins-opoku-baah/>

EDUCATION

- **Ph.D. in Neuroscience**,
Vanderbilt University, Aug
2015 – March 2022
(Confirmed Graduation Date),
GPA: 3.81
- **Doctor of Optometry (OD)**,
Kwame Nkrumah University of
Science and Technology,
Ghana, Aug 2008 – Jun 2014,
CWA: 74.45% (Distinction)

LINKS TO PROJECTS

https://github.com/copokubaah/COVID_DataVisualization

Data Visualization YouTube Channel:
<https://www.youtube.com/@statsmania504>

SKILLS

- MATLAB programming
- Python (pandas, NumPy, matplotlib, seaborn, SciPy, statsmodels, scikit-learn, beautiful soup)
- Jupiter Notebooks/PyCharm
- SQL
- PowerBI
- Microsoft Excel
- SPSS/JASP
- Research study design and protocol development
- Statistical analysis, A/B testing and modeling
- Machine Learning
- GitHub/Git

CERTIFICATE/LICENSES

- Statistics: Making Sense of Data, Coursera, June 2013
- Machine Learning, Stanford University, January 2019
- IBM Data Science Professional Certificate, IBM, March 2019
- Neural Networks and Deep Learning, DeepLearning.AI, April 2019
- Convolutional Neural Networks, DeepLearning.AI, April 2019

WORK EXPERIENCE

Senior Clinical Scientist, Heru Inc- The Wearable Diagnostic and Vision Augmentation Leaders April 2022 to October 2022

- Led the design and implementation of prototypes for new products through advanced development stages to new product development.
- Contributed to the origination or direction of studies through the development of methodologies.
- Reviewed, analyzed, and interpreted data, and drew conclusions which lead to planning further research.
- Represented Clinical Science in cross-functional project team meetings, provided project status/updates and identified issues or impact to project timelines as appropriate.
- Summarized and interpreted clinical study data in technical reports.
- Designed PowerBI dashboards to track KPIs surrounding clinical and product team efforts.
- Communicated data and conclusions using appropriate interpretation and understanding of clinical outcomes related to product performance.

Research Scientist Intern, Facebook Reality Labs

June 2021-September 2021

- Developed experiments/protocols to assess the impact of different optical architectures on user experience in augmented reality.
- Collaborated with cross-functional groups to determine engineering requirements and design specifications for optical architectures in augmented reality.
- Communicated research findings to stakeholders and also gave recommendations to user experience in augmented reality

Graduate Student Researcher, Multisensory Research Laboratory, Vanderbilt University

January 2016 to March 2022

- Conceived and planned research projects to design behavioral therapies for low vision conditions arising from peripheral (Glaucoma: Vision Restoration Therapy) and central retinal (Contrast Sensitivity Training) disorders.
- Built a customized clinical perimeter with LED lights and audio speakers and implemented visual field testing with Arduino and programming.
- Held scientific conversations with ophthalmologists, optometrists, and researchers at the Vanderbilt eye institute to solicit their engagement in my research project and help in recruiting low vision subjects.
- Presented research findings to large audience at department and also at scientific conferences including Society for Neuroscience (SfN) and Association for Research in Vision and Ophthalmology (ARVO)
- Wrote and prepared manuscripts for submission to vision and multisensory-related peer-reviewed journals.

Research Assistant, Department of Optometry and Visual Science, Kwame Nkrumah University of Science and Technology

August 2013 to May 2015

- Designed research protocols and collected clinical data on a 24-month longitudinal study which aimed to understand the relationship between lag of accommodation and myopia progression when using under-correction as a therapeutic strategy for myopia progression.
- Designed and collected survey and questionnaire data for cross-sectional descriptive studies on the prevalence and causes of blindness and visual impairment, and the compliance to glaucoma management drugs.
- Presented research at conferences and contributed to and published manuscripts in peer-reviewed journals.