



Chisom Ezekannagha

Personal Information

Cell Phone +49 (0)176 74526736
Email chisom.ezekannagha@uni-marburg.de
Address Hans-Meerwein-Str. 6, D-35032, Marburg, Germany

Education

2020– Present **PhD, Computer Science, Bioinformatics**, *Philipps-Universität Marburg, Germany.*
2016 – 2018 **Master of Science, Computer Science (Bioinformatics)**, *University of Ibadan, Nigeria.*
CGPA: 5.5/7.0
2009 – 2013 **Bachelors of Science, Computer Science**, *Anambra State University, Uli, Nigeria.*
CGPA – 3.94/5.00

Work Experience

Oct 2020 – Present **Research Associate**, HEIDER LAB, PHILIPPS-UNIVERSITÄT MARBURG, Marburg, Germany .

- Creating automatic visualization workflows
- Developing exploratory data analysis framework for information storage systems based on biological and chemical compounds
- Tutor and organize workshops for multiple undergraduate and graduate students

- May 2018 – **Research Supervisor**, INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE,
Oct 2019 Ibadan, Nigeria.
- Developed and implemented scripts to parse, process, and analyze genome-wide data sets for RNA sequencing and gene expression studies
 - Carried out data analyses in parallel on large compute cluster; integrate, organize and analyze program output
 - Managed research data-sets on file servers and ensure their appropriate backup, completeness, correctness and integrity
 - Prepared reports of findings by compiling results, generating figures, and preparing tables from analyses of genomics studies
 - Developed research objectives, projects and proposals
- May 2017 – **Research Fellow**, INTERNATIONAL INSTITUTE OF TROPICAL AGRICULTURE,
April 2018 Ibadan, Nigeria.
- Developed new computational method called GeAnnotate for annotation of Cassava genes
 - Used programming languages such as R/Python for pipeline development
 - Made presentations at conferences/exhibit work at other appropriate events
 - Assisted in preparing scientific presentations, grant applications and manuscripts

Complementary Education

- 2022 **OxML Summer school**, *Oxford Machine Learning summer school*, University of Oxford, England.
(Virtual)
- 2021 **Bio+Med+Vis Spring school**, *The 1st Spring School on Biological and Medical Visualization*, (Virtual).
- 2019 **Workshop**, *Next Generation Sequencing Bioinformatics*, University of Witwatersrand, Johannesburg, South Africa.
- 2016 **Training**, *H3ABioNet Introduction to Bioinformatics Course (IBT)*, University of Ibadan, Nigeria.

Publications

- 2022 **Ezekannagha, C., Heider, D., Hattab, G.**, *DNAsmart: Multiple Attribute Ranking Tool for DNA Data Storage Systems*, Computational and Structural Biotechnology Journal, (under review).
- 2022 **Ezekannagha, C., Becker, A., Heider, D., Hattab, G.**, *Design considerations for advancing data storage with synthetic DNA for long-term archiving*, Materials Today Bio, <https://doi.org/10.1016/j.mtbio.2022.100306>.
- 2022 **Kaya, G., Ezekannagha, C., Heider, D., Hattab, G.**, *Context-Aware Phylogenetic Trees for Phylogeny-based Taxonomy Visualization*, Frontiers in Genetics, <https://doi.org/10.3389/fgene.2022.891240>.
- 2021 **Olagunju, T., Ezekannagha, C., Gisel, A.**, *3'-Tag RNA-Sequencing*, EMBnet.journal, <https://doi.org/10.14806/ej.26.A.968>.

Selected Conferences

- 2022 IEEE Visualization Conference (VIS). Oklahoma City, Chicago, USA. (attendee)

- 2022 24th EG Conference on Visualization (EuroVis). Rome, Italy. (attendee, Student Volunteer)
- 2022 The 1st International Conference on Data storage in Molecular Media (DSMM).Bielefeld, Germany. (Presenter)
- 2021 IEEE Visualization Conference (VIS). New Orleans, Louisiana, USA. (attendee)
- 2021 11th EG Workshop on Visual Computing for Biology and Medicine (VCBM).Paris, France. (attendee)
- 2021 Symposium on Interdisciplinary Bioinformatics and Biomedical Data Science (IBB-MDS).Marburg, Germany. (attendee)
- 2020 IEEE Visualization Conference (VIS). Salt Lake City, Utah, USA. (attendee)
- 2020 Eurographics & Eurovis (EGEV). Norrköpping, Sweden. (attendee)
- 2019 The 1st Nigerian Bioinformatics Conference(NBC): Bioinformatics in the era of genomics in Africa. Nigerian Institute of Medical Research (NIMR), Lagos, Nigeria. (Poster)
- 2018 The International Association of Research Scholars and Fellow 21th Annual Symposium on "Sustainable Graduate Research for Transformation of Africa's Agro-food and Industrial Utilization". IITA Ibadan, Nigeria
- 2017 The International Association of Research Scholars and Fellow 20th Annual Symposium on "Contribution of IITA Graduate Research in Transforming African Agriculture". IITA Ibadan, Nigeria

Teaching

- 2022 **Seminar**, *Introduction to Bioinformatics*, Department of Mathematics and Computer Science, University of Marburg. Marburg, Germany. 1 SEM. (tutor)
- 2021 **Course**, *Data Visualization*, Department of Mathematics and Computer Science, University of Marburg. Marburg, Germany. 1 SEM. (co-tutor)
- 2020–2022 **Seminar**, *Biological Data Visualization*, Department of Mathematics and Computer Science, University of Marburg. Marburg, Germany. 3 SEM. (co-tutor)

Grants

- 2019 **Welcome Genome Campus**, *Next Generation Sequencing Bioinformatics*, University of Witswatersrand, Johannesburg, South Africa, (Seminar Grant).
- 2016 **H3Africa**, *H3ABioNet Introduction to Bioinformatics Course (IBT)*, University of Ibadan, Nigeria, (Training Grant).

Projects

- Bioinformatics A Computational pipeline for Genome annotation and Metabolic Pathway Reconstruction in plants (A case Study of Cassava) M.Sc dissertation

Computer Science Design and Implementation of GPA calculator B.Sc Project

Skills

Language Igbo(Native), English(Fluent), German(Elementary)

IT skills

- Programming: JavaScript(React, D3), R, Python
- Database: SQL, MySQL
- Scripting: UNIX Shell, XHTML
- Office productivity: Microsoft Office Suite, LaTeX
- Machine Learning: TensorFlow, Scikit-learn

Additional skills Bioinformatics, Data Visualization, Web Development

Soft skills

- Excellent organizational and communication skills
- Good Interpersonal skills with great ability to function in multicultural environment
- Ability to work effectively and productively in a team