# **CURRICULUM VITAE**

# Juliana Mantebea Danso

## 1. CONTACT INFORMATION

Address: Texas State University, 601 University Dr, San Marcos, TX 78666

Email: julianamantebeadanso@outlook.com

## 2. PERSONAL DATA

 Date of Birth
 : 22nd October, 1994

 Nationality
 : Ghanaian

 Gender
 : Female

 Languages spoken
 : English – Fluent, Official Language (Listening, Reading, Speaking and Writing)

 Chinese – Basic (Listening, Pinyin Reading, Speaking)

 Asante Twi – Native (Listening, Reading, Speaking and Writing)

## 3. PROFESSIONAL SUMMARY

Juliana Mantebea Danso is a researcher in Computer Science and currently a PhD candidate at the University of Electronic Science and Technology of China. She has two (2) Masters Degrees with over four (4) years of research experience and has about 10 published articles in both journals and conferences. In addition, she has 7 years working exposure within the university environment. Her research interests are in deep learning models for computer vision, autonomous driving and natural language tasks

# 4. EDUCATIONAL BACKGROUND AND ACADEMIC QUALIFICATIONS

Qualification	University	Year	GPA	Cert. No.	Division		
1. MEng Computer Science and	University of Electronic Science and Technology of	2019 to	3.88/4.0	10614320			
Technology	China, Chengdu, Sichuan	2021		21001150			
MEng thesis topic: Re	MEng thesis topic: Real-Time Object and Lane Detection with Deep Metric Learning from Road Footage Data, for Autonomous Driving Scenario						
2. MPhil Computer Science	Kwame Nkrumah University of Science and Technology (KNUST), Kumasi	2018 to 2020	3.66/4.0	PG5220518			
MPhil thesis topic: Integrating Encryption with Separable Reversible Data Hiding Techniques for Image Steganography					ues for Image		
3. BSc Computer	Kwame Nkrumah University of	2014	3.71/4.0	20374966	First Class		
Science	Science and Technology (KNUST), Kumasi	to 2018	70.25 (Top 5%)	2564214	Honors		
BSc thesis topic: Raspberry-Pi Based Motion Detection Surveillance System BSc 3 <sup>rd</sup> year mini-project topic: Comparing the Performance of Image Contrast Enhancement Techniques							

## 5. EMPLOYMENT HISTORY

Position	Name of Institution	Year
1. Teaching Assistant	University of Electronic Science and Technology of China, Chengdu, Sichuan	2021
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2. Executive, Deputy Secretary	International Student Union (ISU), University of Electronic Science and Technology of China, Chengdu	2020 – 2021
3. Executive, Secretary	National Union of Ghana Students (NUGS), China, Chnegdu Chapter, Sichuan Province	2020 – 2021
4. Teaching Assistant, National Service	Kwame Nkrumah University of Science and Technology, Kumasi	2018 – 2019
5. Intern	University of Education, Winneba, Kumasi (I.C.T Unit)	2016

## 6. PROFESSIONAL SOCIETY MEMBERSHIPS

So	ciety	Membership Type	Membership ID	Certificate URL
1.	Institute of Mathematical Statistics (IMS)	Student Membership	37081	<u>GitHub link</u>
2.	American Mathematical Society (AMS)	Unemployed Member	DNJLMB	<u>GitHub link</u>
3.	Young African Leaders Initiative (YALI) Network	Member	_	<u>GitHub link</u>
4.	Individual Member of the International Society for Photogrammetry and Remote Sensing (ISPRS)	Individual Member	230221083138	<u>GitHub link</u>
5.	International Association of Engineers (IAENG)	Member	334218	<u>GitHub link</u>

## 7. RESEARCH PUBLICATIONS, CONFERENCES AND WORKSHOPS

## (a) Summary of Research Publications Counts

First author:	Corresponding author (CA):	Co-author:	<u>Published</u>	Under Review	Total number:
2	3	5	9	2	13

Total number of publications is 10 out of which 9 are published and 1 is under review. Out of the 10 publications, I am the first author of 2, the corresponding author of 3 and the co-author of 5. I have attended and/or presented my research finding at 4 international conferences

## (b) Summary of Research Publications Fields

Deep learning; Machine learning; Metric learning; Visualization, Natural Language Processing-Computer Vision (NLP-CV) integration; Steganography, Autonomous driving systems; Fairness in Artificial Intelligence (AI) systems and models; Artificial Intelligence Application for Human Activity Classification tasks; Photogrammetry and Remote Sensing

## (c) Published

#### 2023

- 1. **Danso J. M**. **(1/5)**, (2023). Reseed Skipping in Linear Congruential Generator for Multi-level Image Steganography Security of Financial Data, *SN Computer Science*, 4(2), 1-29. Article number: 124 (2023). *DOI*
- 2. **Danso J. M.** (9/10) (2023). Classification from Sky: A Robust Remote Sensing Time Series Image Classification Using Spatial Encoder and Multi-Fast Channel Attention. *Journal of King Saud University-Computer and Information Sciences*, 34(10), 10405-10422. DOI

- 3. **Danso J. M.** (4/10) (2023). A Model-agnostic XAI Approach for Developing Low-cost IoT Intrusion Detection Dataset. *Journal of Information Security and Cybercrimes Research*, 6(2), 74-88. <u>DOI</u>
- 4. **Danso J. M.** (8/10) (2023). Federated Lung Cancer Prediction Using Histopathological Medical Images. In 19th IEEE International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP) (pp. 1-6). <u>DOI</u>.

#### 2022

- 5. **Danso, J. M., (1/7)**, (2022). Harnessing Keypoints with Deep Metric Learning for Lane Line Instance Segmentation. In 2022 3rd IEEE International Conference on Pattern Recognition and Machine Learning (PRML) (pp. 159-166). DOI.
- 6. **Danso J. M., (2/7) (CA)** (2022). Virtual Mapping of CCTV System using 3D Design Tools: A Case of C.K. Tedam University of Technology and Applied Sciences (CKT-UTAS). *Asian Journal of Research in Computer Science*. *URL*
- 7. **Danso J. M., (3/7),** (2022). Geometric-inspired Particle Swarm Optimization (PSO) for Classification Tasks. *International Journal of Computer Applications* (IJCA) 183(53):32-40, February 2022. *URL*.
- 8. **Danso, J. M., (4/5) (CA)** (2022). Assessing the Impact of Satellite Internet in Rural Areas: A Case of CK Tedam University of Technology and Applied Sciences, Navrongo, Ghana. *Asian Journal of Computer Science and Technology*, 11(2), 25-32. <u>URL</u>
- 9. **Danso, J. M., (3/5) (CA)** (2022). Text Mining a Decade of Focal Development Trends in an African Country. In 2021 18th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP) (pp. 77-82). IEEE. <u>URL</u>.

  Google Scholar Citations as @ 26th October 2022 = 9
- 10. **Danso, J. M., (9/11)** (2022). Federated Lung Cancer Prediction Using Histopathological Medical Images. *In 2022 19th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP)* (pp. 1-6). IEEE. *URL*

#### 2021

11. **Danso, J. M., (2/5),** (2021) Raspberry Pi Motion Detection Surveillance System, *International Journal of Advance Research and Innovative Ideas in Education (IJARIIE)*, Vol-7 Issue-4 2021, ISSN (Online)-2395-4396. *URL* 

#### *2018*

12. **Danso J. M., (4/5)**. Measuring the Performance of Image Contrast Enhancement Technique. *International Journal of Computer Applications*. Vol. 181, pp. 6-13. DOI: 10.5120/ijca2018917899. <u>URL</u>

## (d) <u>Under Review</u>

## <u> 2024</u>

13. **Danso, J. M., (3/5)** (2023). Particle Swarm Optimization with Time-Varying Inertia and Convex-Hull Bound Constraint Handling for Repairing Infeasible Solutions in Classification Task, *International Journal of Engineering Science and Technology Review* 

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14. **Danso**, J. M., (2/5) (2024). Automated Video-Based Techniques for Enhancing Athlete Stride Characteristic Measurement in Elite Sprinting, *Journal of Imaging* 

## (e) Conferences Attended

#### 2019

1. **Participant**, In Eleventh International Conference on Graphics and Image Processing (ICGIP 2019), 12th to 14th October 2019, Hangzhou, China, co-organized by College of Computer Science, Sichuan University, supported by Ocean University of China, University of Portsmouth; China Society of Image and Graphics (CSIG), China Graphics Society (CGS); and Xidian University.

Presented on the paper: deb2viz: Debiasing gender in word embedding data using subspace visualization

2. **Participant**, 2019 16<sup>th</sup> and 2020 17<sup>th</sup> International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), December 13<sup>th</sup> to 15<sup>th</sup> 2019, organized by University of Electronic Science and Technology of China (UESTC), Chengdu, sponsored by The National Natural Science Foundation of China (NSFC), National High Technology Research and Development Program of China and China International Talent Exchange Foundation.

#### 2020

3. **Participant**, 2020 17<sup>th</sup> International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), 18<sup>th</sup> to 20<sup>th</sup> December 2020, organized by University of Electronic Science and Technology of China (UESTC), Chengdu.

### *2021*

4. **Participating Author**, In 2021 18<sup>th</sup> International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), 17<sup>th</sup> to 19<sup>th</sup> December 2020, organized by University of Electronic Science and Technology of China (UESTC), Chengdu.

Paper title: Text Mining a Decade of Focal Development Trends in an African Country

#### 2022

5. **Presenting Author**, In 3<sup>rd</sup> International Conference on Pattern Recognition and Machine Learning (PRML 2022) 22<sup>nd</sup> to 24<sup>th</sup> July 2022, Chengdu, China, co-organized by University of Electronic Science and Technology of China, (UESTC), Chengdu.

Paper title: Harnessing Key points with Deep Metric Learning for Lane Line Instance Segmentation

Won the best paper presentation award. See Certificate

## (f) Review Experience

1.	Reviewer, International Journal of Network Security (IJNS)	2019 - Date
2.	Reviewer, Springer Nature Computer Science (SNCS)	2021 – Date
3.	Reviewer, Advances in Science, Technology and Engineering Systems (ASTES) Journal	2022 - Date

#### (g) Workshops Attended

- 1. Selected to attend a workshop themed 'Ghana Data Science Summit 2019-The Promise of Data Science for Economic Transformation', organized by INDABAX Ghana, held at Kofi Annan Center of Excellence in ICT, Accra in April 2019
- 2. Attended workshop themed HackLAB annual Hackathon, held at KNUST in April 2018.
- 3. Attended workshop themed HackLAB Advancing Technology in Ghana, held at KNUST, Kumasi, in 2017.
- 4. Attended workshop themed Google Africa Scholarship Front End Course, organized by Andela Learning Community (ALC) in 2018.
- 5. Attended workshop themed HackLAB Promoting E-Commerce in Ghana, held at KNUST, Kumasi, in 2016.
- 6. Attended a career and personal development conference themed 'A Decade of Transforming Lives through Springboard Road Show', organized by DARETODREAM in 2016.

## 8. AWARDS

- Recipient of the Chinese University Scholarship (2019–2021) partial award tenable at the University of Electronic Science and Technology of China (UESTC) Chengdu, P.R. of China to pursue a Master programme in Computer Science and Technology
- 2. Recipient of Second Prize Academic Achievement Award, School of Computer Science & Engineering, December 2020
- 3. Recipient of a scholarship from MAXIM NYANSA I.T SOLUTIONS for intensive I.T Professionalism Program as a preparation towards the EXIN Agile Scrum Foundation (ASF) Examination in June 2017.

Awarded a Project Management Certificate, EXIN Certificate, Agile Scrum Foundation (ASF), Registration Number: 6206596, Certificate Number: 6208962.20743940 – July 2018. *Certificate Link* 

## 9. QUALITIES & HOBBIES

## 9.1.Qualities

Public Speaking, Excellent communication skills, Good interpersonal skills, Analytical thinker, Goal-getter, Quick adaptation, Self-motivated, Ability to work within deadlines, Team player, Willingness and ability to learn and work independently

## 9.2. Hobbies

Internet surfing, Reading, Writing, Music, Jogging, Art, Photography, Research

## 10.REFEREES

1. Prof. Michael Asante,

Bachelor Supervisor,

Department of Computer Science

Faculty of Physical and Computational Sciences

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Kwame Nkrumah University of Science and Technology (KNUST)

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2. Prof. Xie Ning,

MEng Supervisor,

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3. Dr. Yaw Marfo Missah,

MPhil Supervisor,

Department of Computer Science,

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