

# AKIRI SURELY

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## EDUCATION

University of Maryland, Baltimore County (UMBC)  
Ph.D., Human Centered Computing  
Specializations: Affective Computing

Expected May 2022

University of Maryland, Baltimore County  
(UMBC)  
M.S., Human Centered Computing

August 2018 - May 2020

United States International University, Kenya  
(USIU-Africa)  
B.Sc. Applied Computer Technology  
Magna Cum Laude

May 2015 - July 2018

## RESEARCH EXPERIENCE

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### Affective Behavior Interaction Lab, UMBC

*Principal Investigator, The Impact of COVID-19 on First Responders and Family Project*

*June 2020- Present*

- Designed data collection survey instrument to investigate the stress phenomenon in EMS providers.
- Analyzed qualitative research data seeking to draw attention to the adverse circumstances faced by EMS providers in the arduous fight against the Sar-Cov-2 pandemic. Aim to publish to a journal conference venue.

### *Research Assistant, Stress Reflection Project*

*January 2019– Present*

- Designed study protocol for collecting affective nonverbal behavior data during paramedic training simulations.
- Developed a Stress Reflection Training System based on multimodal data collected from senior paramedic training simulations.
- Conducted pilot studies to evaluate the benefits and accessibility of Stress Reflection system. Aim to publish to DISC, 2021.
- Investigated physiological synchrony in teams during paramedic training simulation. ICMI'20 Late-Breaking Paper .

### *Research Assistant, Understanding Body Expressions Along the Affective Dimensions in Paramedic Training Simulation Project*

*July 2020– Present*

- Evaluated and prepared software to rate body expressions along affective dimensions.
- Quantitative data analysis to identify associations and prediction among nonverbal behaviors. Aim to publish at ACII, 2021.

### Sensor Accelerated Intelligent Learning Lab, UMBC

#### *Research Assistant, EL Project*

*November – July 2018*

- Performed literature review to investigate haptic neurofeedback approaches to augment preconscious perception and emotion regulation among nurses.

- Developed computational model to study the cost of emotional labor.

### ***Smart and Connected Health***

**August – September 2018**

- Performed literature review on wearable devices best suited for breast cancer survivors sensor monitoring.
- Carried out quantitative data analysis on previously obtained questionnaire responses and sensor monitoring.
- Created patient groups based on emerging patterns of medication taking behaviors.

### **Undergraduate Research, USIU-Africa**

#### • **Senior Project, DSLA**

**January – May 2018**

- Carried out a feasibility study on the adoption of an automated process for land acquisition in Delta State, Nigeria.
- Developed and deployed on GitHub a mobile application that displays available government owned lands, allows users book appointment and check availability.
- Developed and deployed on GitHub administrative dashboard for the DSLA mobile application that allows admin to check analytics on users, respond to appointments and handle surveyor data.

#### • **Africa's Talking Gaming Summer School, Squash Game:**

**May – August 2017**

- Collected survey data on the use of a food ordering application for nearby restaurants to the University.
- Developed and deployed Happy Bites mobile application on GitHub based on user responses.

## **INDUSTRY EXPERIENCE**

### **Software Development Intern, *Unleashed Technologies***

**June 2019 – July 2019**

- Learnt Drupal content management system and applied knowledge in conjunction with object-oriented PHP to build client software.

### **Software Engineering Intern, *Interswitch Group Kenya***

**May 2018 – July 2018**

- Designed and prototyped user interface designs for ongoing company projects.
- Investigated and gave feedback on user experience of legacy system, Autopay.

## **SKILLS**

### • **Programming**

NASM Assembly language, PHP and SQL, Java, Web Front-end Development(HTML, CSS, XML and SCSS), and Interpreted Languages (Python, MATLAB and JavaScript)

### • **Design**

InVision, Inkscape, Sketch, Balsamiq

### • **Databases**

MySQL, Microsoft SQL Server

### • **Languages**

English, French, Swahili

## AWARDS AND HONORS

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- Anita Borg Masterclass Grant Recipient – **December 2020- December 2021,**
- University of Maryland, Baltimore County Graduate Assistantship – **January 2019-Present.**
- United States International University-Africa, Dean's – **April 2015- May 2018.**
- Presenter at the launch of the AppFactory Microsoft 4Afrika – **2018.**

## ACADEMIC & PROFESSIONAL SERVICE

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### Reviewing

- Reviewer: Papers, ACM Conference on Human Factors in Computing Systems – **2021.**

### Committees

- Organizing Committee: ISRC FIKa Meet-ups, Department of HCC, UMBC – **January 2020-Present.**
- Electoral Committee: Information Technology Club (IT Club), USIU-Africa – **September 2017 - May 2018.**

## MEDIA COVERAGE

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- [Responses from EMS providers, family, friends sought for COVID-19 stress study](#), EMS1, August 2020.
- [UMBC's Jiaqi Gong receives \\$1M NIH grant for wearable sensor to help breast cancer survivors maintain complex medication schedules](#), UMBC News, January 2020.

## PROFESSIONAL AFFILIATIONS

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- Graduate Women International (GWI).
- The Interactive Systems Research Center (ISRC).
- Center for Women in Technology (CWIT- UMBC).
- AnitaB.org MasterClass.