

## Ubuntu-Al: A Bottom-up Approach to more Democratic and Equitable Training and Outcomes for Machine Learning



Micheal Nayebare



Ussen Kimanuka



Rehema Baguma



Joshua Mounsey

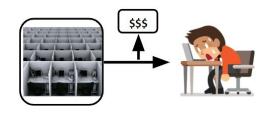


Ron Eglash

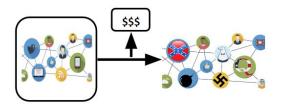
### Problem: Al can amplify value extraction



ecological value
(eg compute's
carbon footprint)
breaks nature's
ability to regenerate

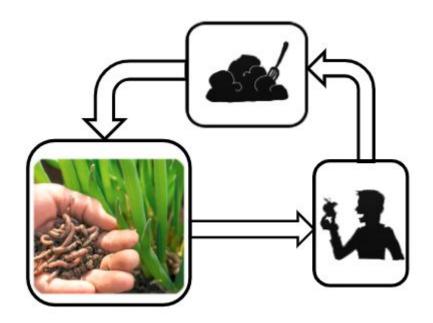


Extracting labor value (eg low-paid boring tasks) this destroys the pride and satisfaction that allows workers to regenerate



**Extracting social value** (eg rec algos amplify polarization)
breaks society's
regeneration of civil,
democratic discourse.

But technological systems don't have to extract value: they can be designed to circulate value without alienation from its source

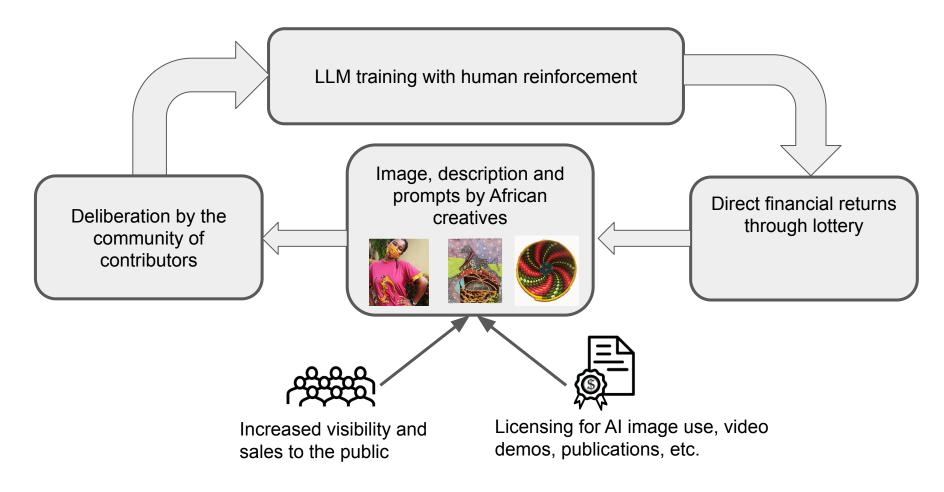


Generative Justice: circulating unalienated value back to those who generate it

## Solution: develop Al training through a circular, generative economy

- Model training should return value to diverse, inclusive data providers
- Model training platforms should be democratically controlled by those data providers

### **Ubuntu-Al: Generative economy for Equitable and Inclusive Model Training**



# Creating prompts with an extractive economy

# **Creating prompts within ubuntu-Al**

### **FORTUNE**

A.I.'s exploitation of human workers could come back to bite it

### **Columbia Journalism Review**

The Exploited Labor Behind Artificial Intelligence

- We ask artists: "what questions might someone ask, such that the AI brings them to your images?"
- Artists are self-motivated to come up with lots of prompts
- The information better reflects how they see themselves in knowledge seeking processes
- We can now refine the LLM trained on the artist's descriptions using these prompts.

Figure 4: Comparing AI prompts in an extractive economy vs Ubuntu-AI's generative justice approach

### Democratizing Al training through a platform which:

- Returns economic value to data creators
- Strengthens rights for the data providers
- Facilitates its own democratic governance and deliberation
- Results in more inclusive knowledge depth and accuracy for Al

The case study is specific to African art

The ultimate aim is a model for generative economies that can be developed for any knowledge domain, in any geographic region.

## Looking for partnership/ideas with:

### Generative image producers:

- --are there ways our artists might license with you?
- --are their NST or other apps we could provide for free to our artists on the platform?

### African partnering organizations:

- --we would ideally like to hand off the platform to an African non-profit at the end of the research phase
- --happy to follow up with anyone's suggestions for an NGO

Future funding: other AI initiatives interested in supporting this effort

## **Demo**

### **All Projects**





SaNdawatya

I was born in Harare, Zimbabwe, in 1990,...



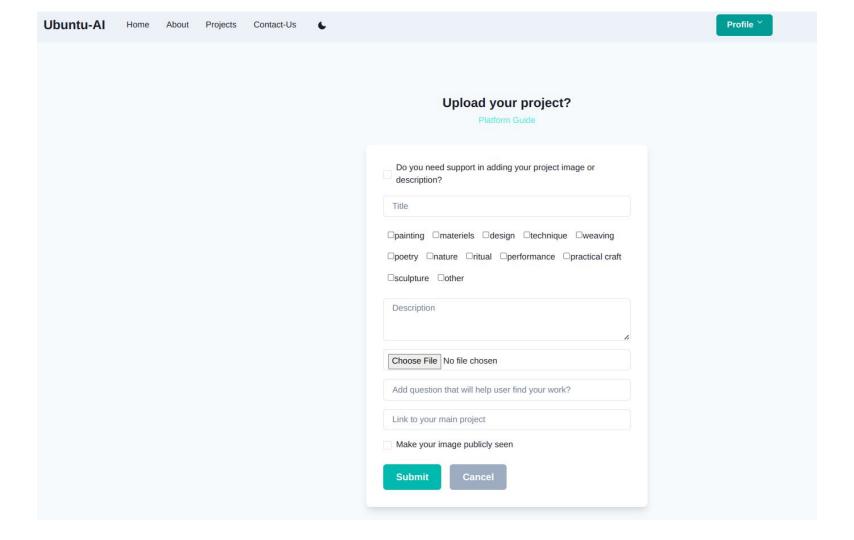
**Akoben Shirt** 

A soft t-shirt with the African-Heritage...

1







Keep in mind that the image and description you enter will be available to the public on the Ubuntu-Al website.

We will also use this to train Artificial Intelligence, so that when someone asks questions about African art, it can draw from your materials in its repository of knowledge.

Ubuntu-Al Home About Projects **€** Sign in

### All Projects





SaNdawatya
I was born in Harare, Zimbabwe, in



Materials: Pen markers, acrylic paint, f...



Materials: Pen markers, acrylic paint, p...



Kunyangira Yaona Materials: Aluminium, patina, peephole, ...



Sign up

Chiropa Chamutiro

Materials: Pen ink, calligraphy ink, gol...

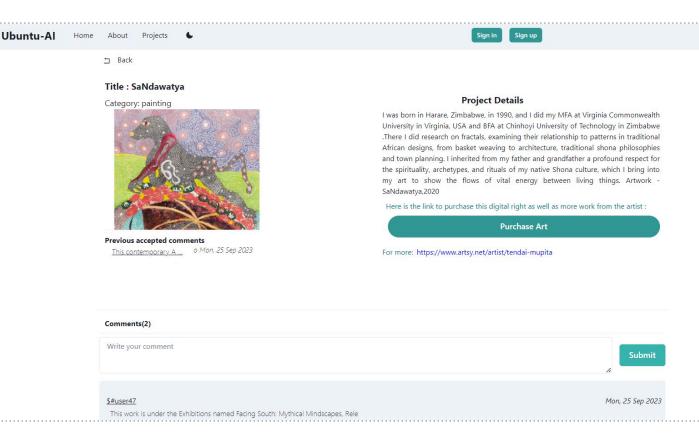
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© 2023 Democratic Inputs to AI.



After the contribution is uploaded, they accept or reject comments from others: this is the first phase of the deliberative aspect of the platform.

Later phases may involve collective decision making functions, depending on what the community of contributors decides



**Profile** 

Back

#### Title: SaNdawatya

### Category:



Previous accepted comments

This contemporary A ... o Mon, 25 Sep 2023

### **Project Details**

I was born in Harare, Zimbabwe, in 1990, and I did my MFA at Virginia Commonwealth University in Virginia, USA and BFA at Chinhoyi University of Technology in Zimbabwe .There I did research on fractals, examining their relationship to patterns in traditional African designs, from basket weaving to architecture, traditional shona philosophies and town planning. I inherited from my father and grandfather a profound respect for the spirituality, archetypes, and rituals of my native Shona culture, which I bring into my art to show the flows of vital energy between living things. Artwork - SaNdawatya,2020

Here is the link to purchase this digital right as well as more work from the artist :

#### **Purchase Art**

For more: https://www.artsy.net/artist/tendai-mupita

### Comments(2)

Write your comment

Submit

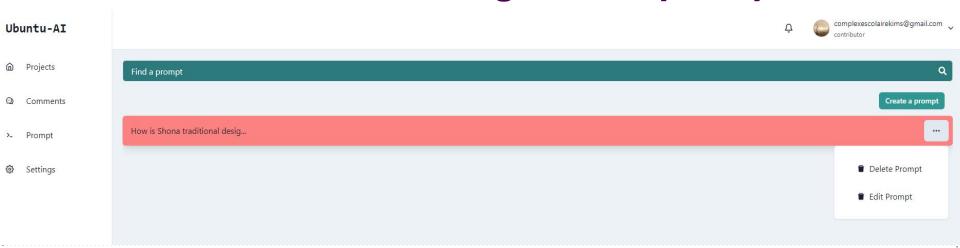
\$#user47

This work is under the Exhibitions named Facing South: Mythical Mindscapes, Rele

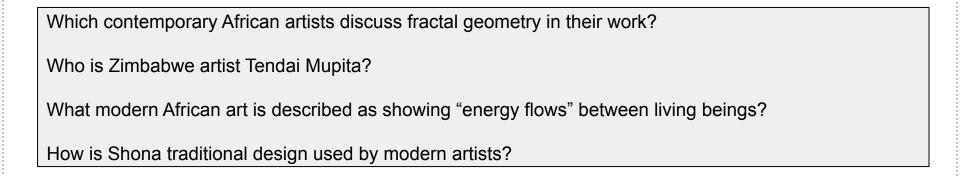
Reply Delete Approve

Mon, 25 Sep 2023

## The contributors also generate prompts



Please list examples of questions that could lead to the image you uploaded:





## Asante Medaase Mweebale

**Question & Comments?**