

Origin Zero

BeatKitchen – Cold Streets
(87 BPM) Rap Instrume 

<https://hackhpc.github.io/admi26>



HACKHPC

@ADMI26

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Origin Zero

Team Members Names

- Emmanuel Akwasi Opoku
- Prince Osei
- Anthony Nwafor
- Amelia Hunter

Origin Tracking



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PROJECT STATUS

PROGRESS

- Wikipedia crawler built and pulling live articles
- 60 articles crawled, 474 edges mapped
- Knowledge graph built with NetworkX
- PageRank running — root causes identified
- Origin chain saved to JSON for next stage

PageRank ranked African-American History as the #1 root cause of Type 2 diabetes — not diet, not genetics.

NEXT 24 HOURS

- Set up Groq API and generate AI narrative
- Build D3.js frontend visualization
- Connect full pipeline end to end
- Deploy to GitHub Pages
- Practice 5-minute demo pitch

BLOCKERS

- Hugging Face bart-large-cnn not supported on Python 3.14
- GPT-2 too small — narrative loops and repeats
- Amelia unavailable — team covering crawler part

Solution: Switching to Groq free API (llama3-70b) for high quality narrative generation.

TECHNOLOGY & RESOURCES

STACK IN USE

- Data pipeline

Python

wikipedia-api

NetworkX

NumPy

- AI narrative

Groq API

llama3-70b

- Frontend & hosting

D3.js

HTML/CSS

GitHub Pages

Switched from Hugging Face to Groq — Python 3.14 doesn't support bart-large-cnn. Groq's llama3-70b is faster and free.

INTERESTING FIND

- Wikipedia API returns 1,200+ links from a single article
- Filtering by origin keywords was essential — without it, results were full of medical jargon
- PageRank placed African-American History above diet and nutrition as root cause
- 60 nodes and 474 edges built from one seed article

The data proved our thesis — history ranks higher than biology as the root cause of Type 2 diabetes.