



Weihan Xu¹

Overview

Teasers are an effective tool for promoting content in entertainment, commercial and educational fields.

Challenges

- **Input**: Require long-range multimodal modeling
- **Output**: Maintain audiovisual alignments; manage scene changes; preserve factual accuracy

Contributions

- We propose *DocumentaryNet*, a publicly-available dataset consisting of **1,269 high-quality** documentaries paired with their teasers.
- We propose *TeaserGen*, a narration-centered teaser generation system that can **compress >30-min** documentaries into <3-min teasers.

DocumentaryNet

- **1,269** high-quality documentaries (600+ hours)
- **Sources**: DW Documentary, Public Broadcasting Service (PBS), and National Geographic
- Annotations: Metadata, audio tracks (separated into music, sound effect, and dialogue), and dialogue transcription with timestamps

An example of DocumentaryNet



TeaserGen: Generating Teasers for Long Documentaries

Paul Pu Liang² Haven Kim³ Julian McAuley³ Taylor Berg-Kirkpatrick³ Hao-Wen Dong⁴

¹Duke University ²Massachusetts Institute of Technology ³University of California San Diego ⁴University of Michigan







Duke UC San Diego



Results

	Objective evaluation results										
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Aodel	Query	Decoding	DP	F1 (%)↑	REP (%)	SCR (%)	CLIPScore	VTGHLS			
Baseline models											
Random	Random	-	_	1.67	4.05	7.81	0.56	0.75			
CLIP-NN	Narration	Greedy	×	0.11	92.73	8.29	0.69	0.79			
JniVTG (2023b)	Title	Rank	-	1.82	0	89.68	0.58	1.01			
CLIP-it (2021b)	Narration	Rank	×	1.24	0	99.39	0.56	0.61			
Pretraining-based models											
TeaserGen-PT	Title	Thresholding	-	1.85	0	13.16	0.56	1.02			
TeaserGen-PT	Narration	Thresholding	-	1.07	21.38	22.58	0.58	1.45			
FeaserGen-PT-CLIP	Narration	Threshold	×	1.31	27.23	24.10	0.58	0.74			
earning-based models											
TeaserGen-LR	Narration	Greedy	×	1.56	31.97	27.18	0.58	0.74			
TeaserGen-LR	Narration	Greedy	\checkmark	1.38	26.83	35.48	0.62	0.78			
TeaserGen-LR	Narration	Beam search	×	1.88	24.16	41.97	0.58	0.74			
TeaserGen-LR	Narration	Beam Search	\checkmark	1.88	19.39	46.56	0.63	0.77			
Ground truth	-	-	-	100	>7.86	27.6	0.58	0.64			

Subjective evaluation results

Model	Query	Decoding	Coherence↑	Alignment↑	Engagingness↑	Realness [↑]
UniVTG (2023b) CLIP-it (2021b)	Title Narration	Rank Rank	$\begin{array}{c} 2.61 \pm 0.50 \\ 2.61 \pm 0.46 \end{array}$	$\begin{array}{c} 2.62 \pm 0.47 \\ 2.67 \pm 0.44 \end{array}$	$\begin{array}{c} 2.67 \pm 0.57 \\ 2.57 \pm 0.46 \end{array}$	$\begin{array}{c} 2.66 \pm 0.54 \\ 2.51 \pm 0.46 \end{array}$
TeaserGen-PT TeaserGen-LR TeaserGen-LR	Title Narration Narration	Threshold Greedy Beam search	$\begin{array}{c} \textbf{3.14} \pm \textbf{0.50} \\ 2.90 \pm 0.45 \\ 2.84 \pm 0.46 \end{array}$	$\begin{array}{c} 2.84 \pm 0.57 \\ \textbf{2.88} \pm \textbf{0.48} \\ 2.69 \pm 0.51 \end{array}$	$\begin{array}{c} \textbf{2.81} \pm \textbf{0.49} \\ 2.71 \pm 0.42 \\ 2.71 \pm 0.42 \end{array}$	$\begin{array}{c} \textbf{2.94} \pm \textbf{0.50} \\ 2.71 \pm 0.44 \\ 2.64 \pm 0.41 \end{array}$



Project page

Qualitative examples





arxiv.org/pdf/2410.05586

FeaserGen-LR

Under the scorching Egyptian sun, Dr. Zbigniew Szybranski led team of archaeologists in Luxor, meticulously excavating the unique emple of the revolutionary female pharaoh Hetshepsood. he air buzzed with excitement as John and Maria unearthed nearly 10-foot-tall abandoned sphinx statue at one of Egypt's large

leanwhile, in Aswan, Martina Bartanova's team stumbled upon ancient human remains that could halt their exploration of an

The discovery of a child's remains and a miniature sphinx

Karnak Temple, John and Maria delved into inscriptions revealing Hetshepsood's portrayal as a male pharaoh, while Yale professors

n Dra'abu El Naga, another team meticulously organized fragmented human remains, uncovering stories of women in ancient Egyptian

ican archaeologist Susanne Onstein explored the monument uilding campaigns of Hetshepsood, whose colossal obelisks stood

Ietshepsood and her stepson Tutmose III, the archaeologists face

discovery brought them closer to unraveling the enigmatic legac How do the discoveries and restoration efforts at Hatshepsut's

temple and other archaeological sites in Egypt contribute to our nderstanding of her reign and the broader role of women in

