Interacting with 8-bit

Jared O'Leary
Arizona State University
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What's the plan?

- Jumping in
- What is 8-bit?
- Let's play!
- Let's create!
- Let's share!
- Let's talk!
- Potential Projects
- Further discussion and questions

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How to reach the resources

- www.JaredOLeary.com
  - Music Education Presentations
  - Interacting with 8-bit

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Jumping in

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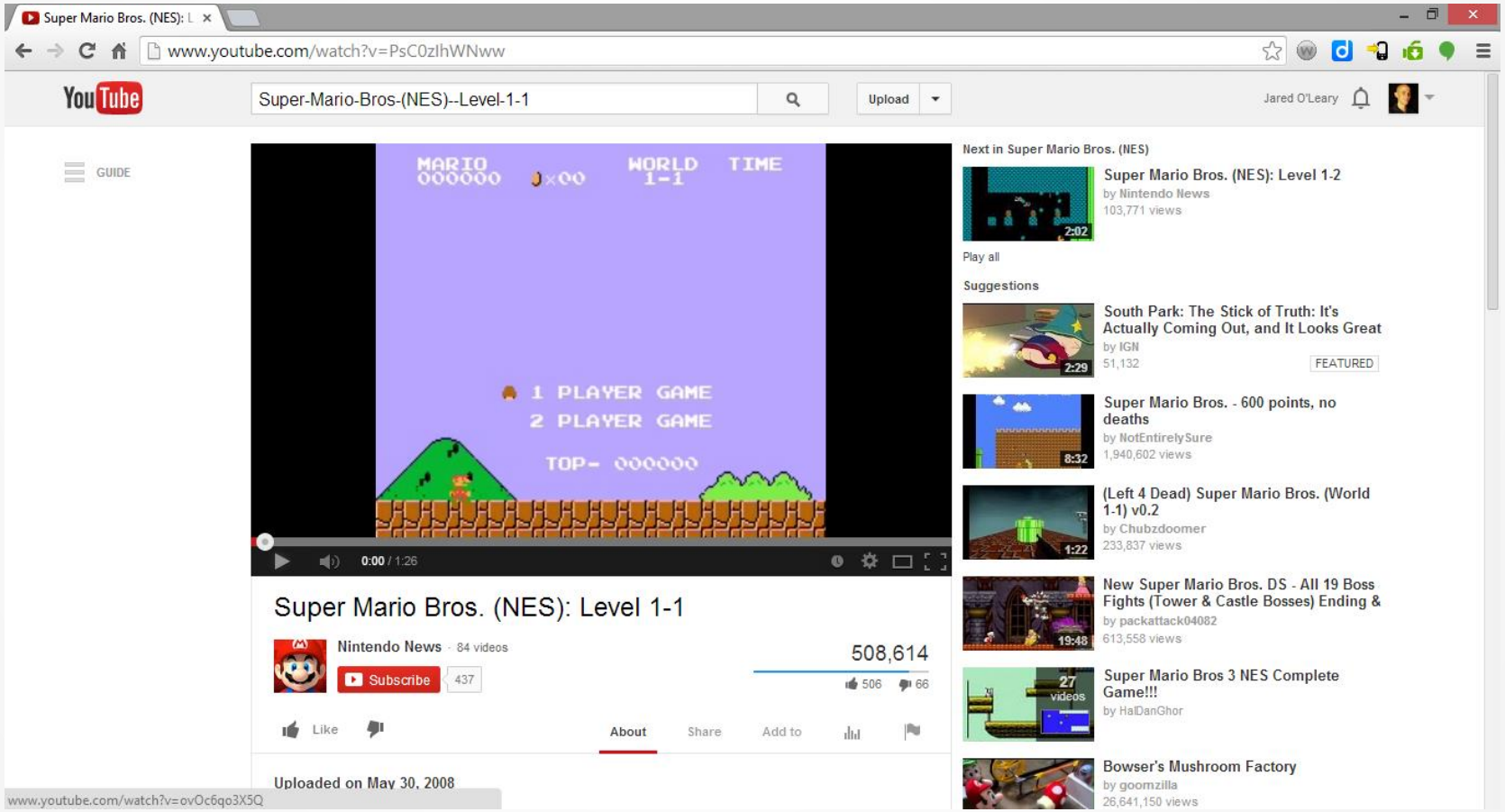
Jumping in:
Super Mario Bros (NES)



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What is 8-bit?

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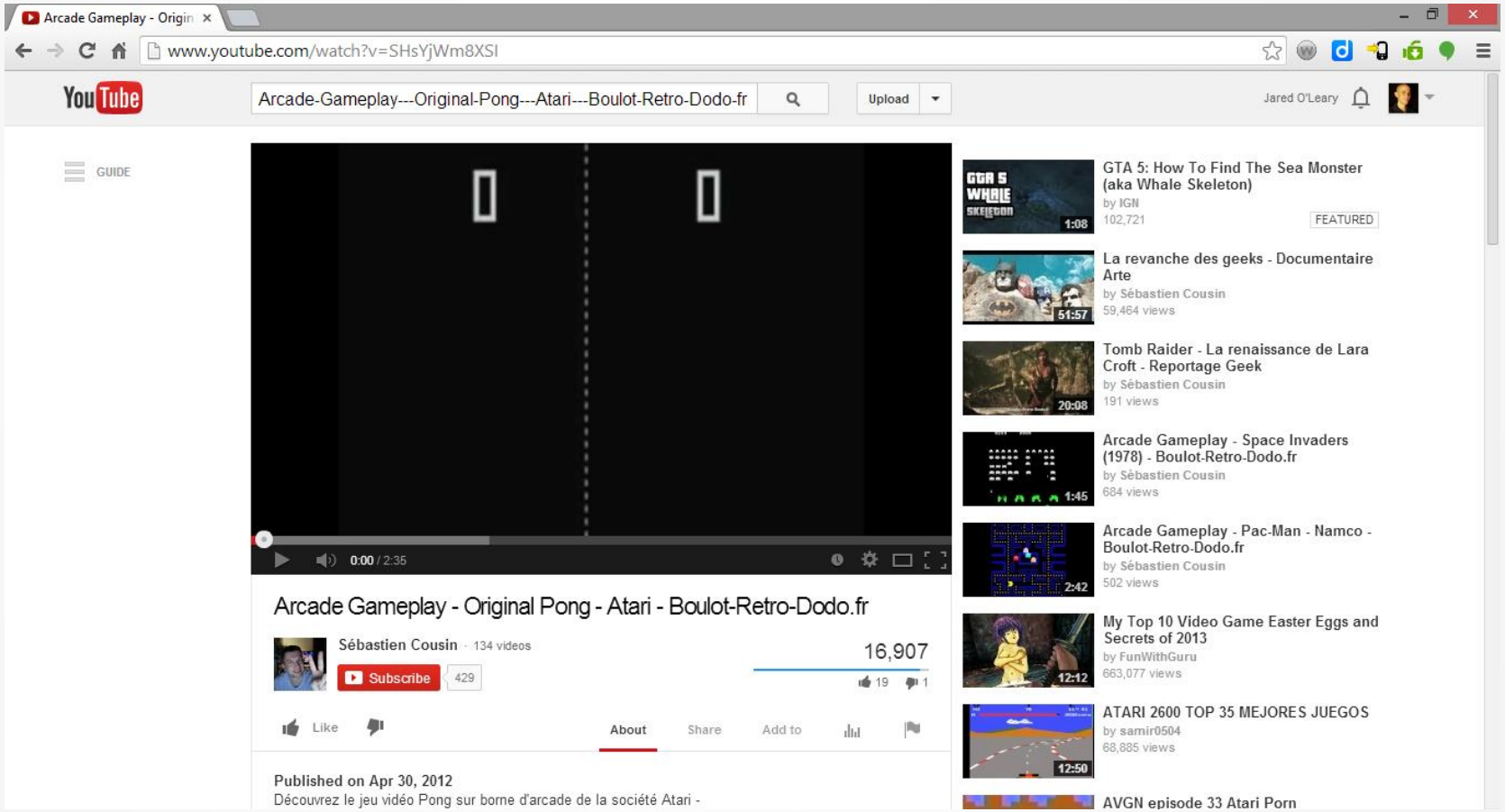
An intro to 8-bit: Pong (Atari)



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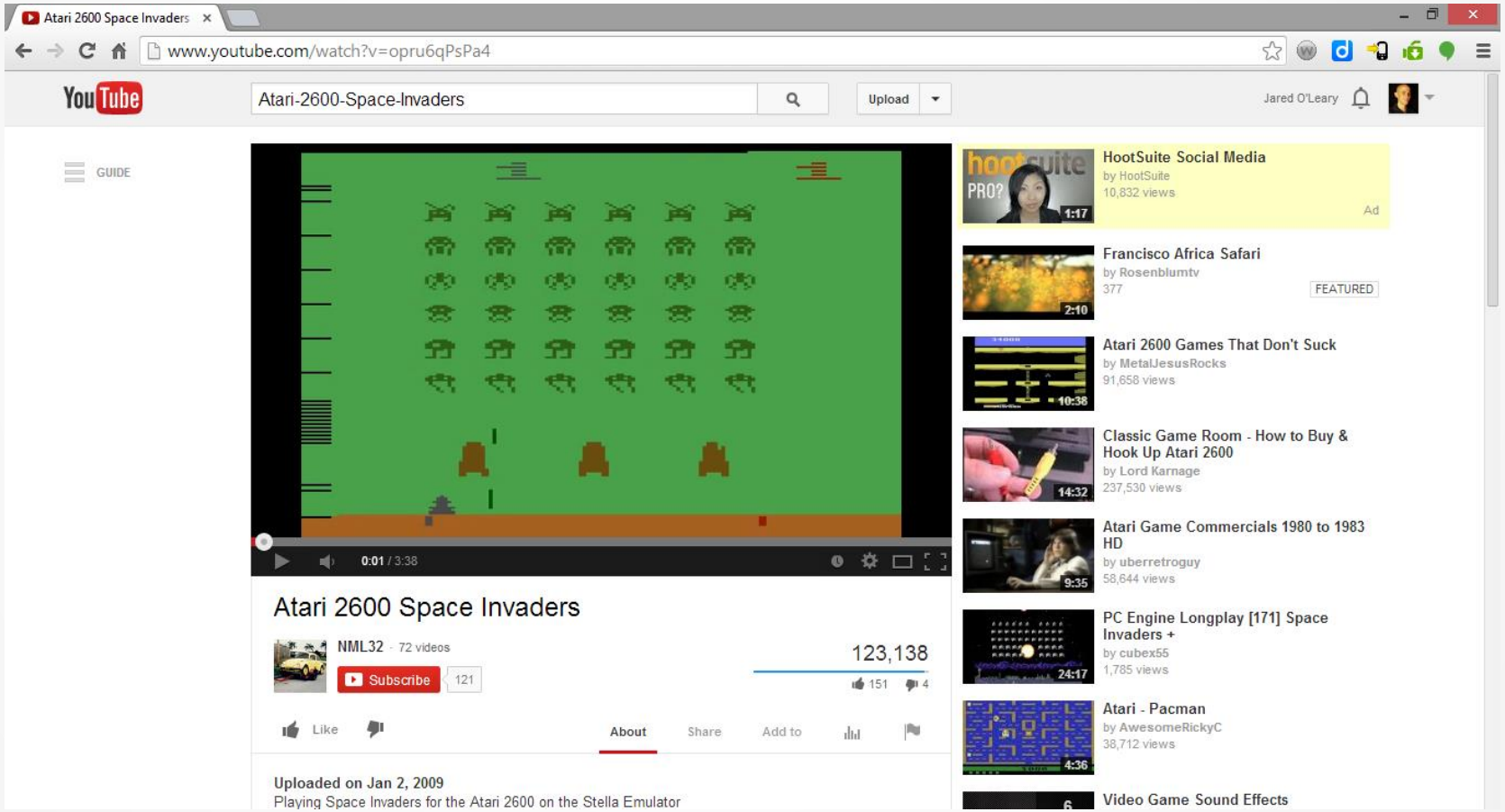
An intro to 8-bit: Space Invaders (Atari 2600)



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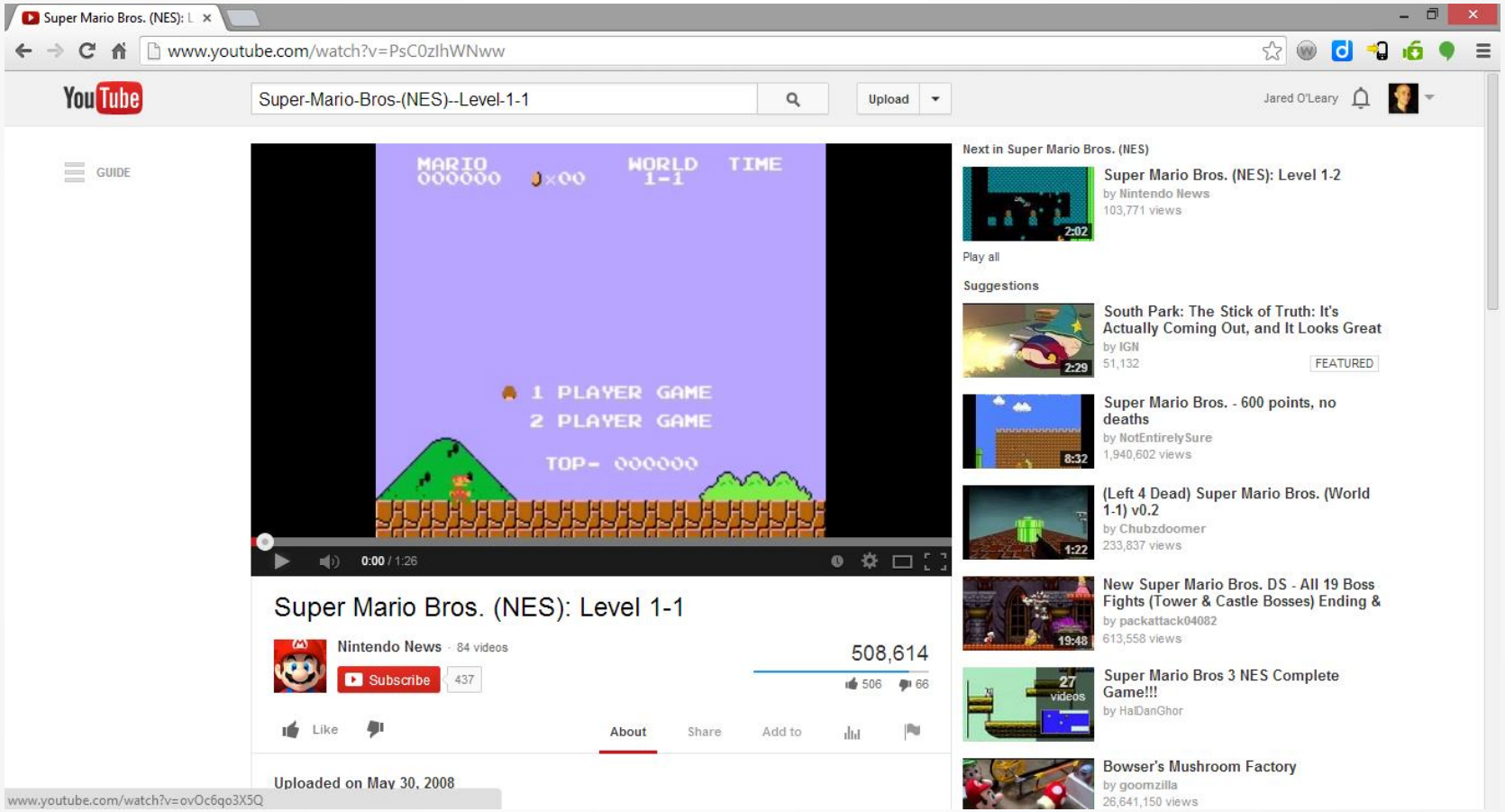
An intro to 8-bit: Super Mario Bros (NES)



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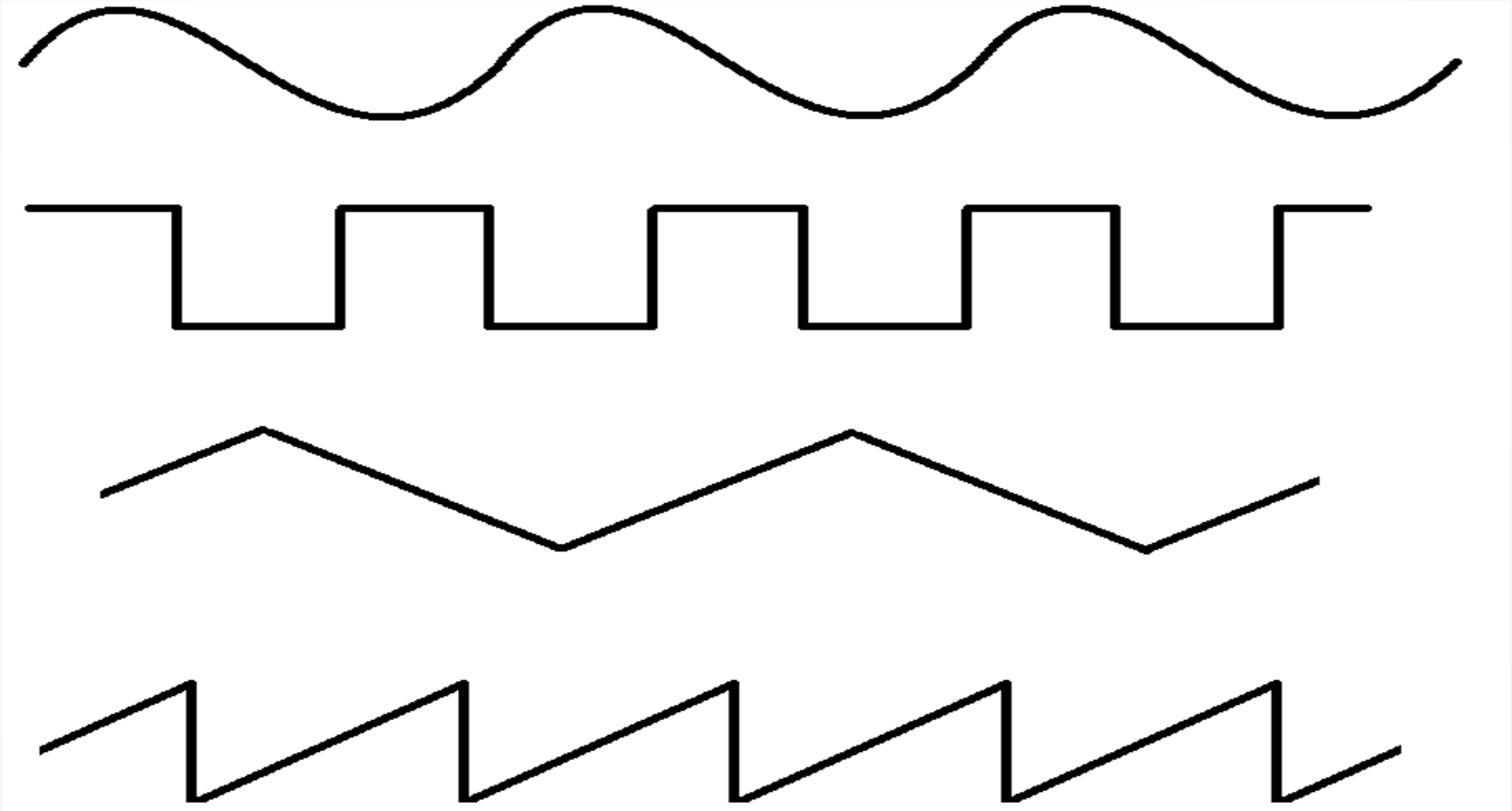
Wave forms in 8-bit



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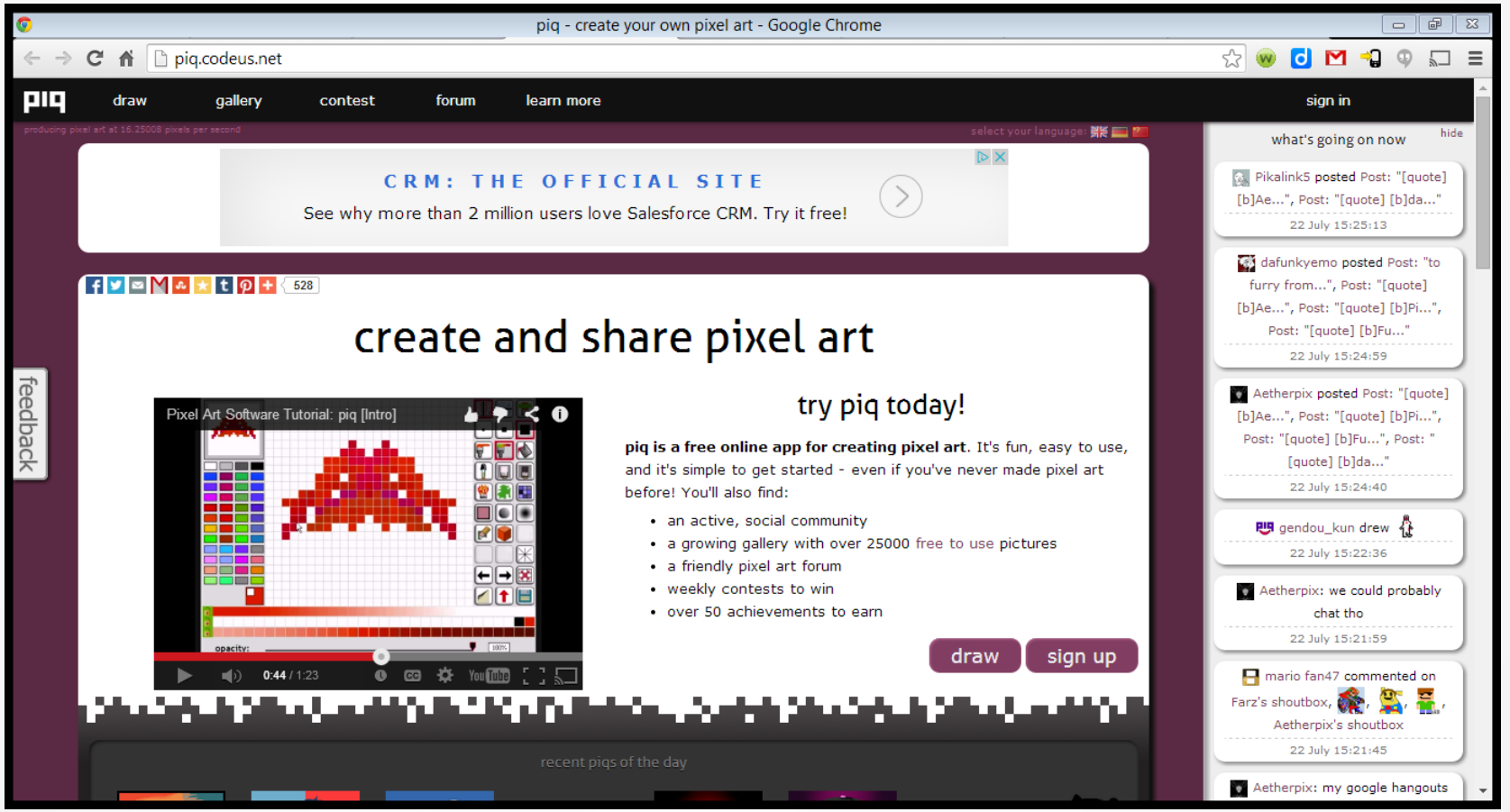
Pixel art



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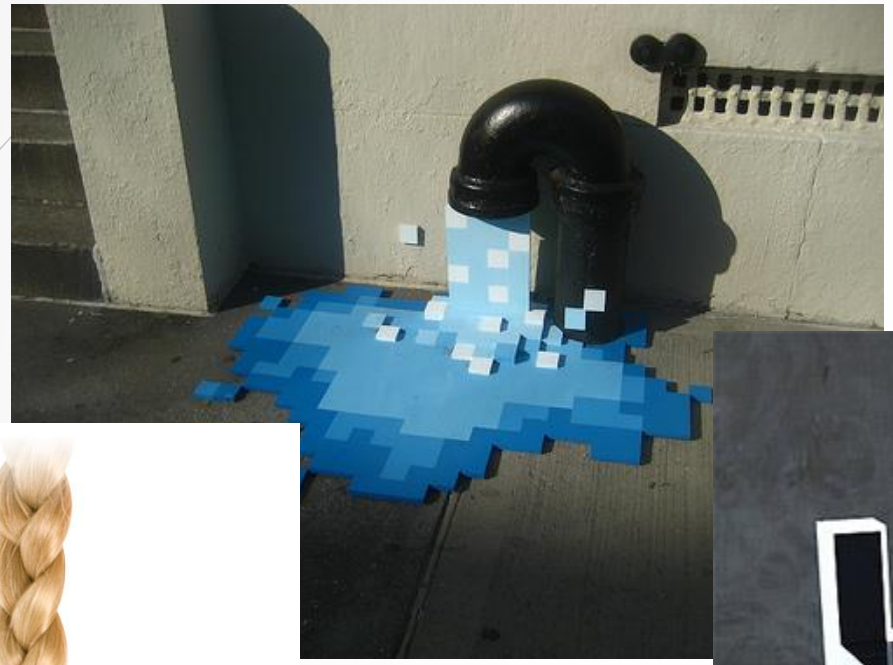
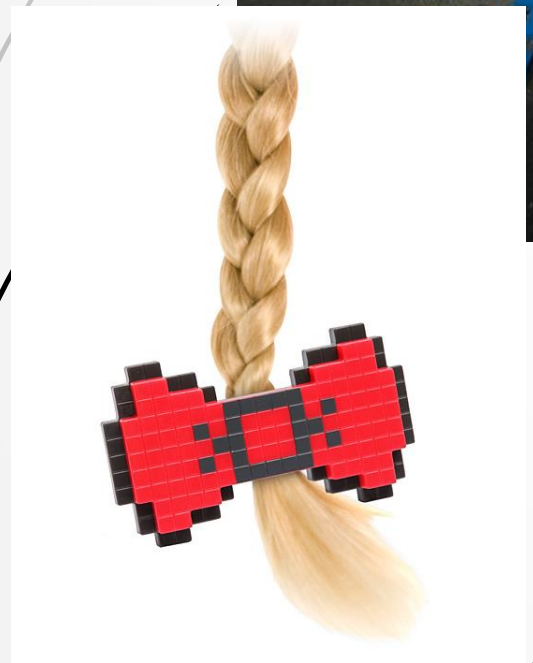
Is 8-bit relevant?





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Let’s play!

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Let's create!

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Let’s share!

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Let’s talk!

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What just happened?

- What aspects of music did we explore?
- How does the 8-bit aesthetic shape the musical decisions we explored?
- How could we interact with sound in video games?
- What unique musical experiences do video games provide?
- What aspects of music could we explore in projects relating to 8-bit video games?

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Why 8-bit and not any MIDI data?

- Technological constraints = project criteria
  - Memory = Limited number of measures
  - Evolving environments = Evolving music
  - Key/Mode = Key/Mode
  - Limited channels = Limited number of voices
  - Wave form limitations = Limited timbre options

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Potential projects

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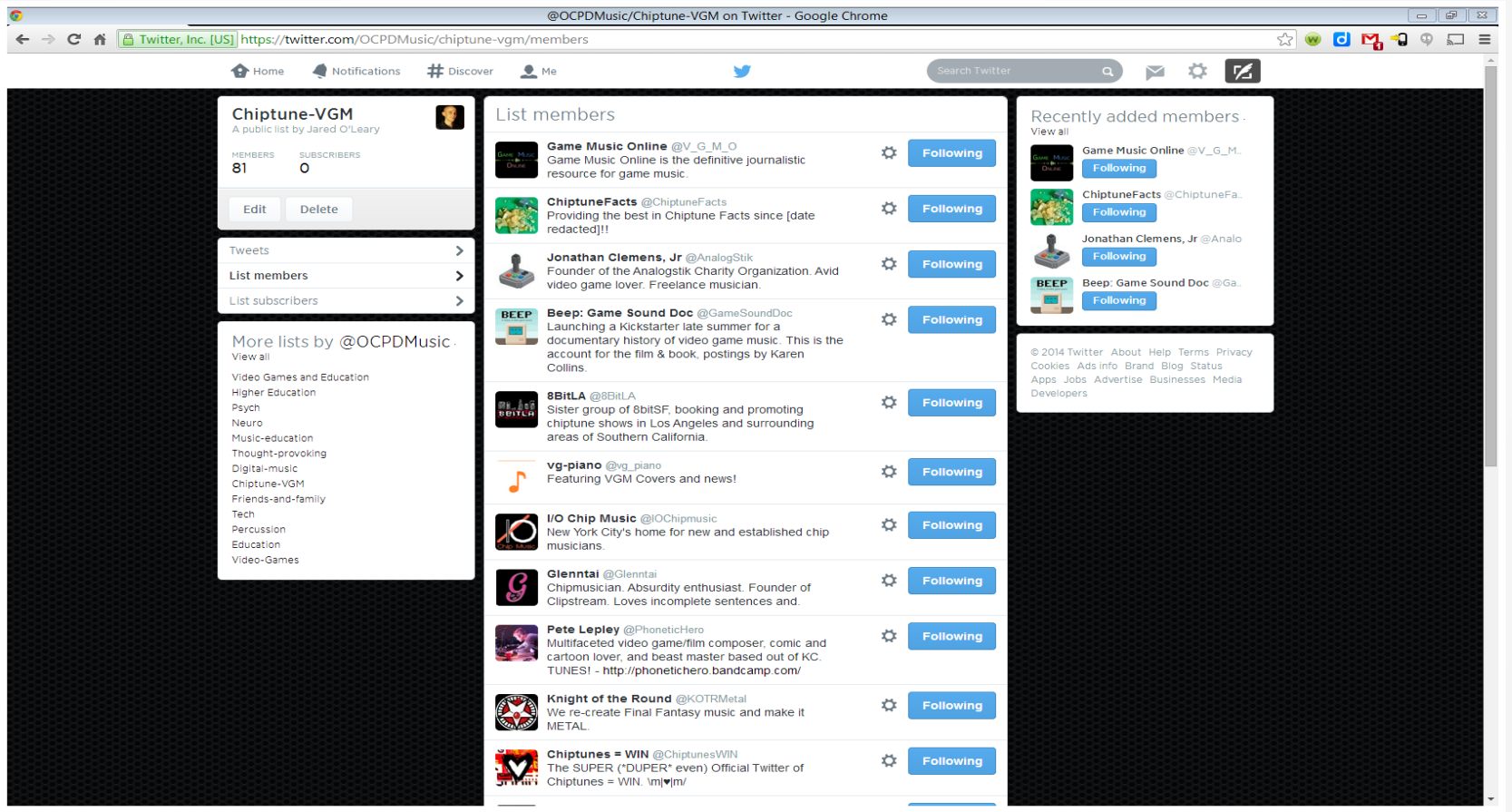
8-bit music: Chiptune artists



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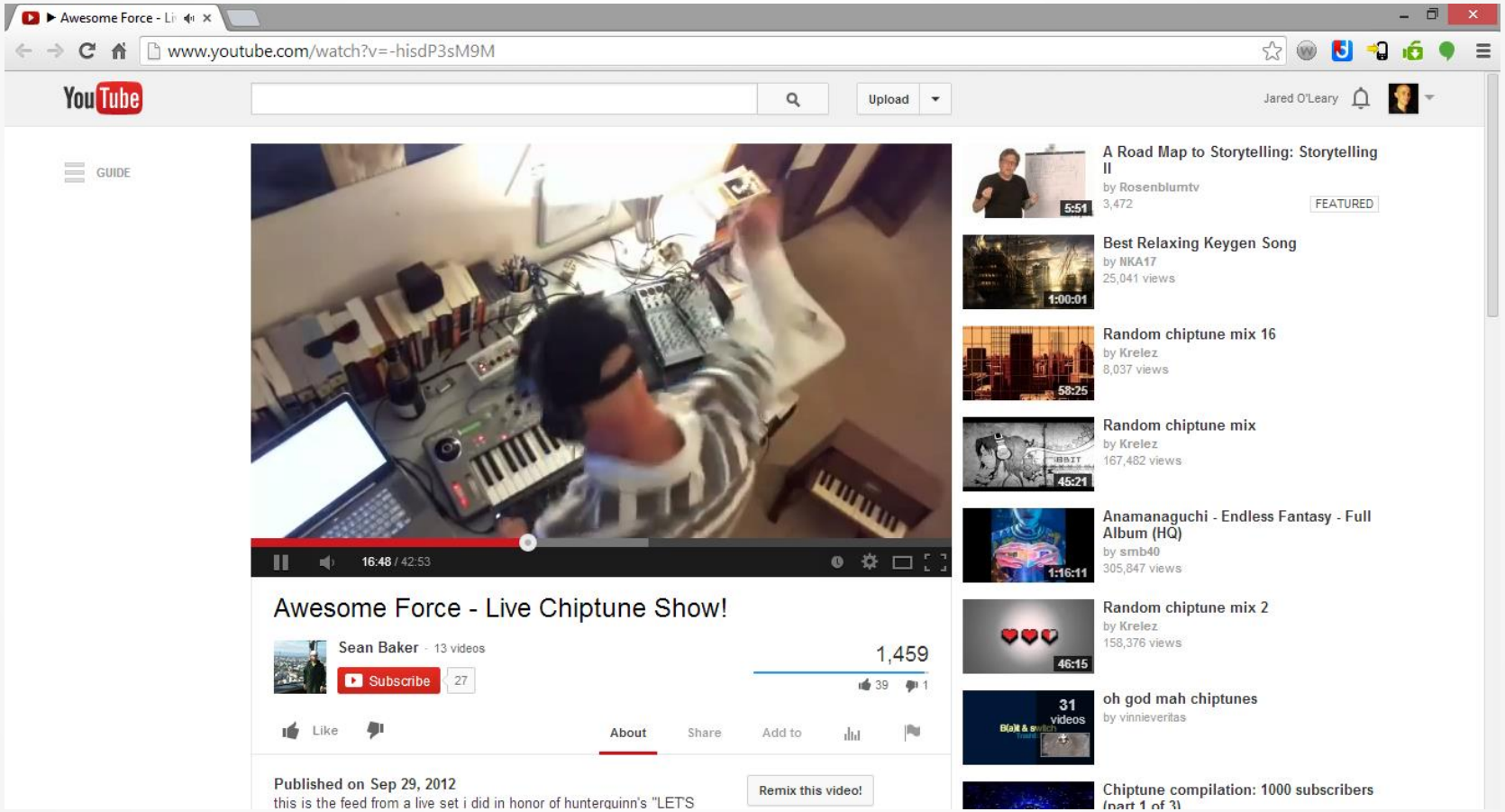
8-bit music: Chiptune artists



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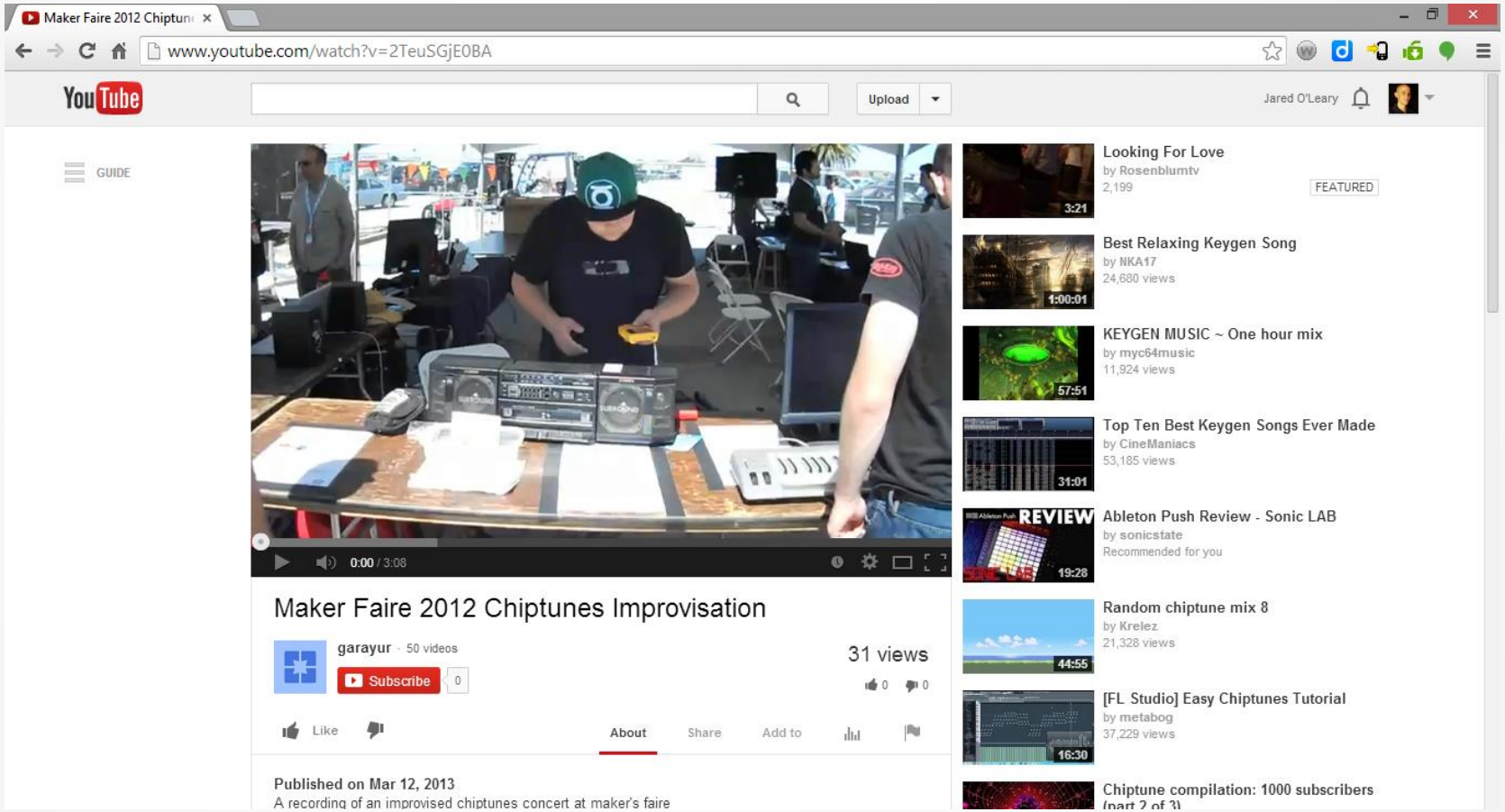

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8-bit music:
Film scoring

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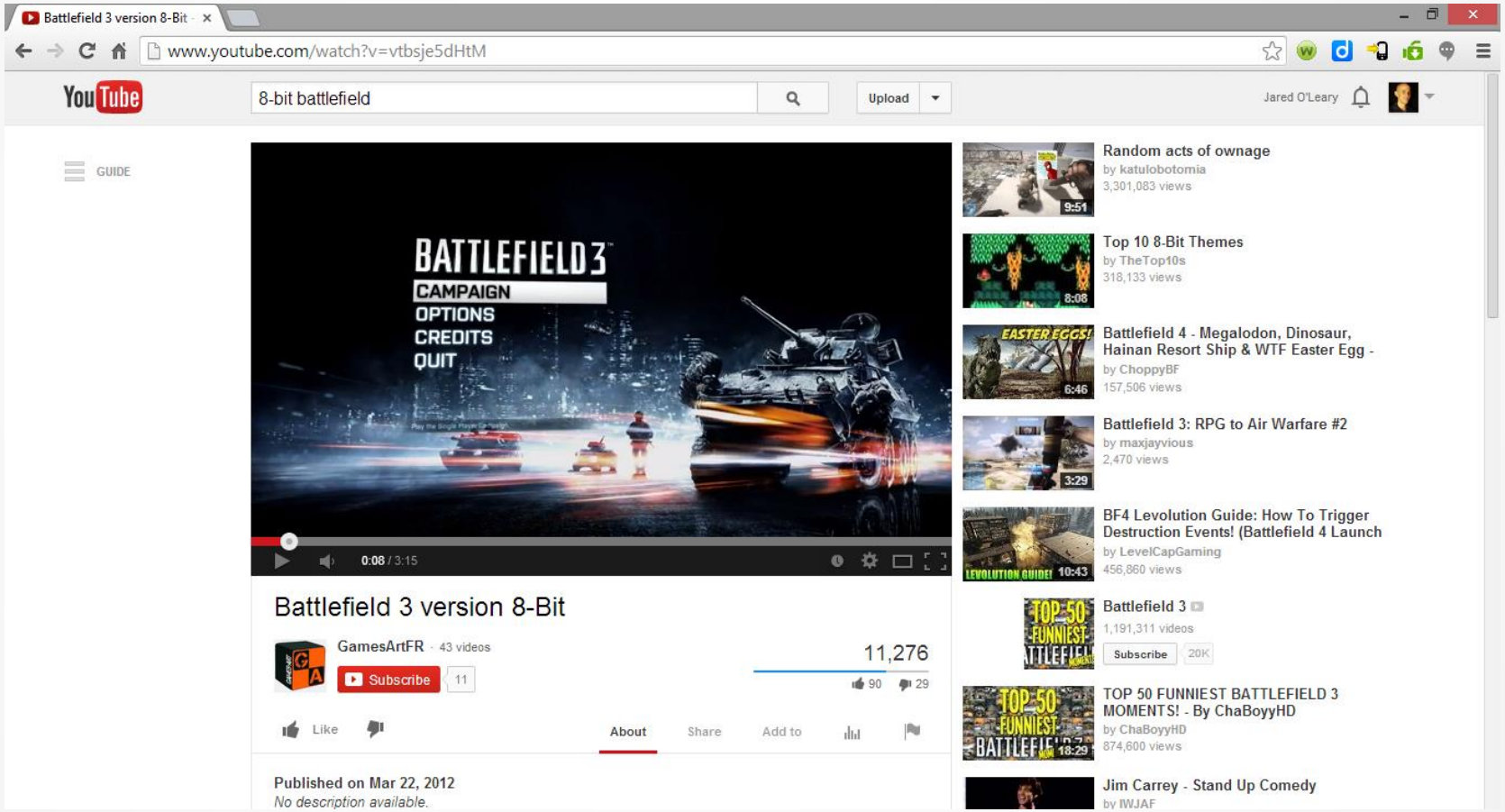
8-bit music:
Film scoring



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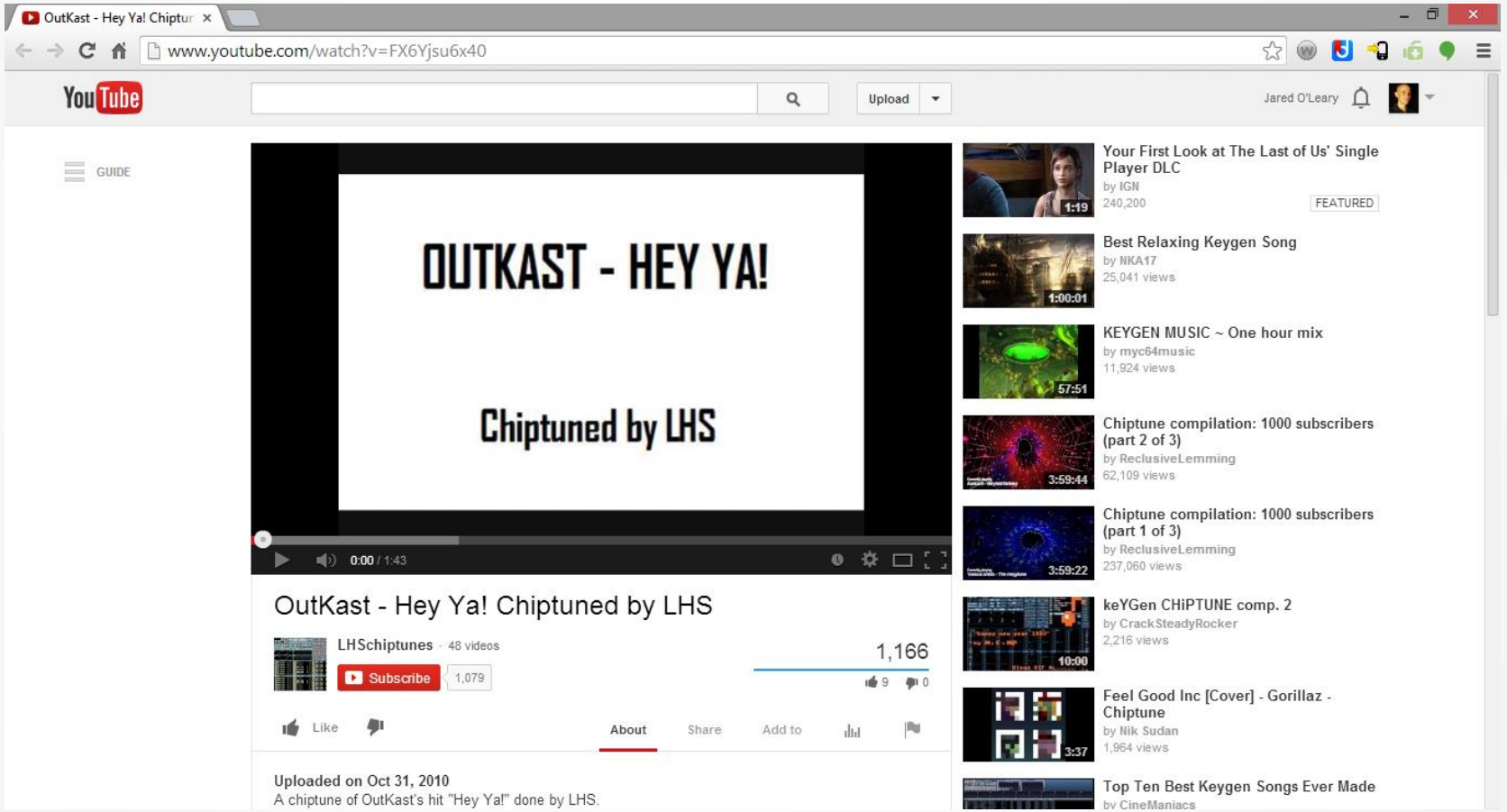
8-bit music: Remixes/covers/arrangements



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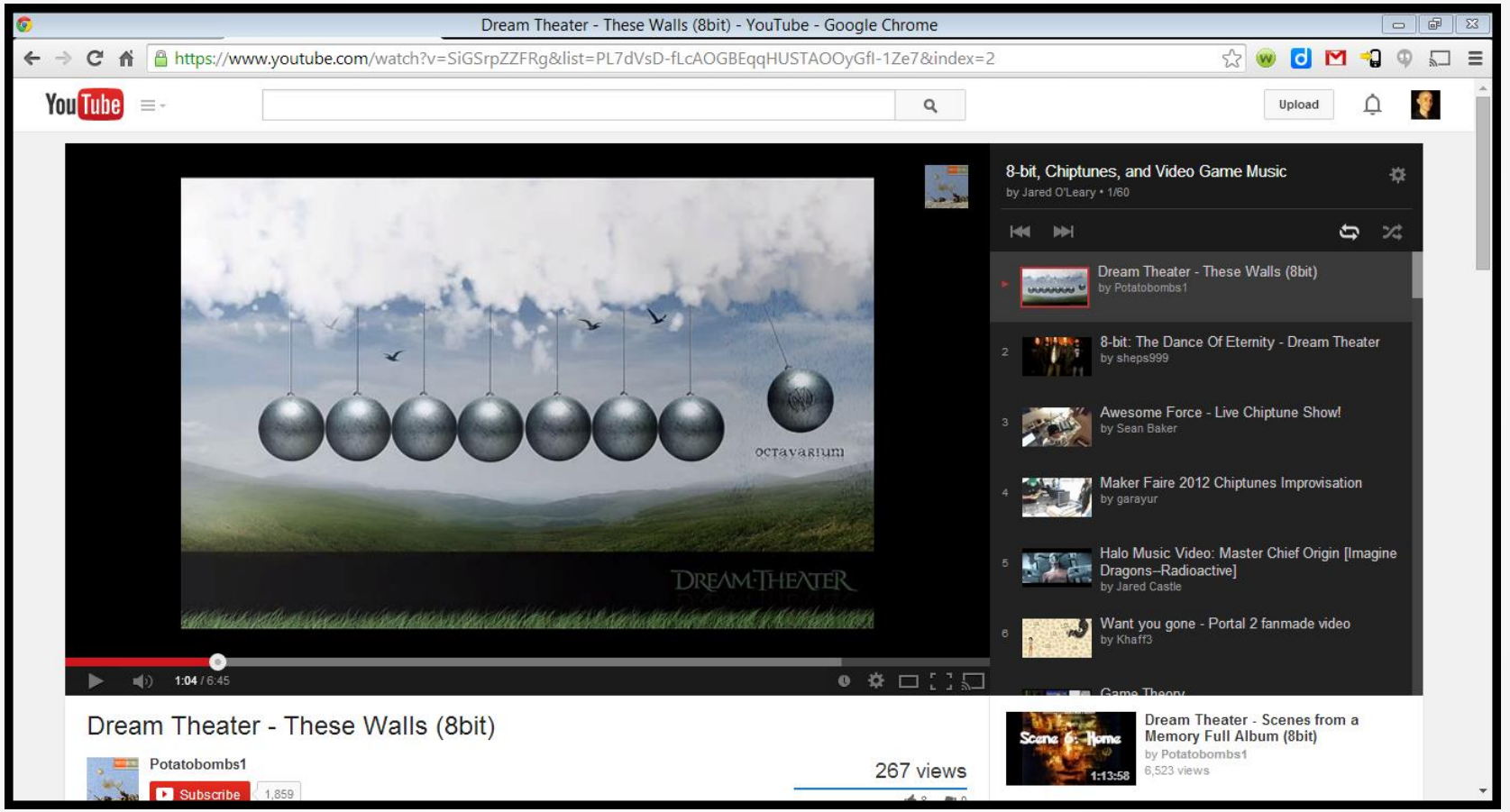

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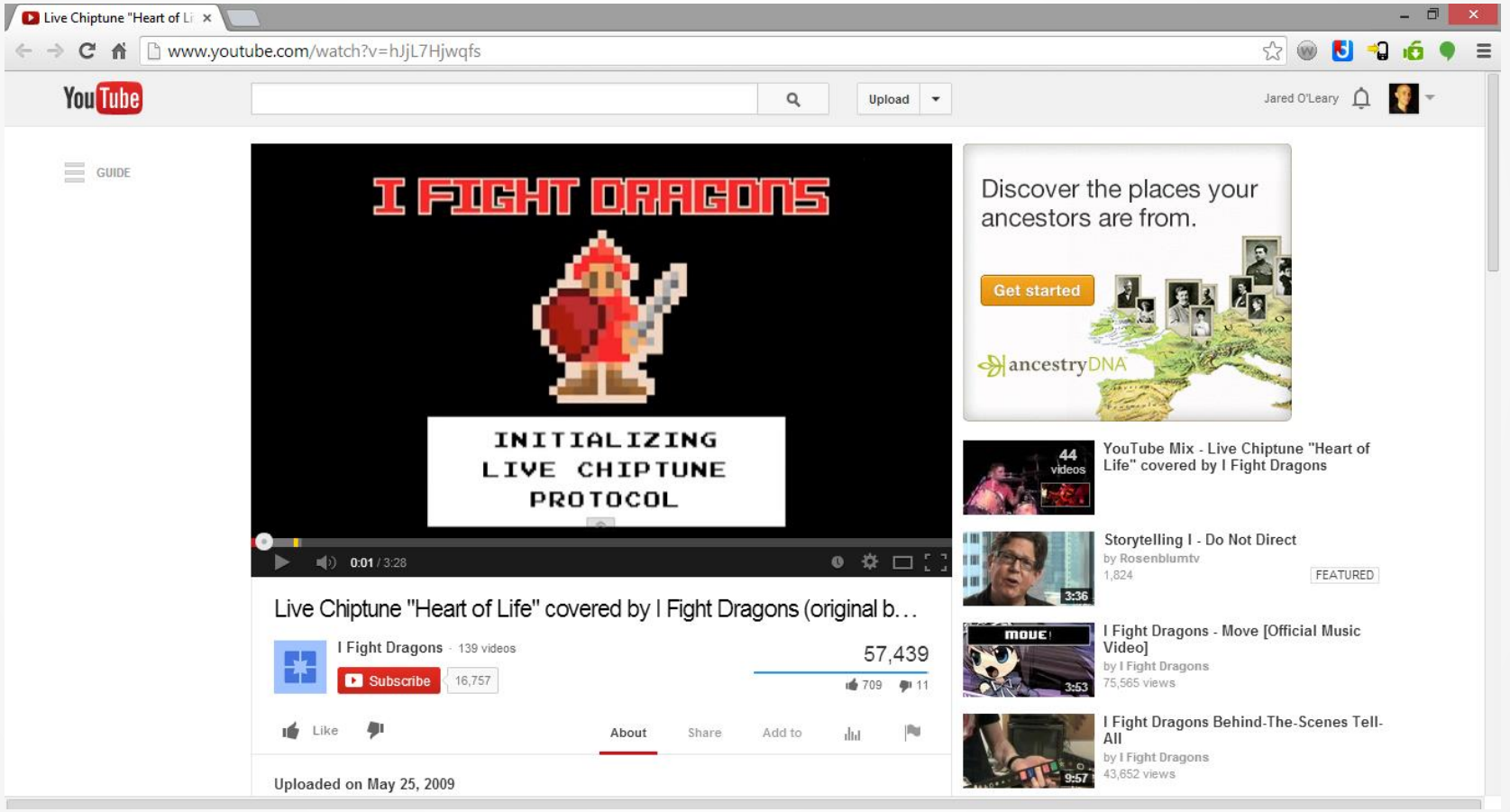

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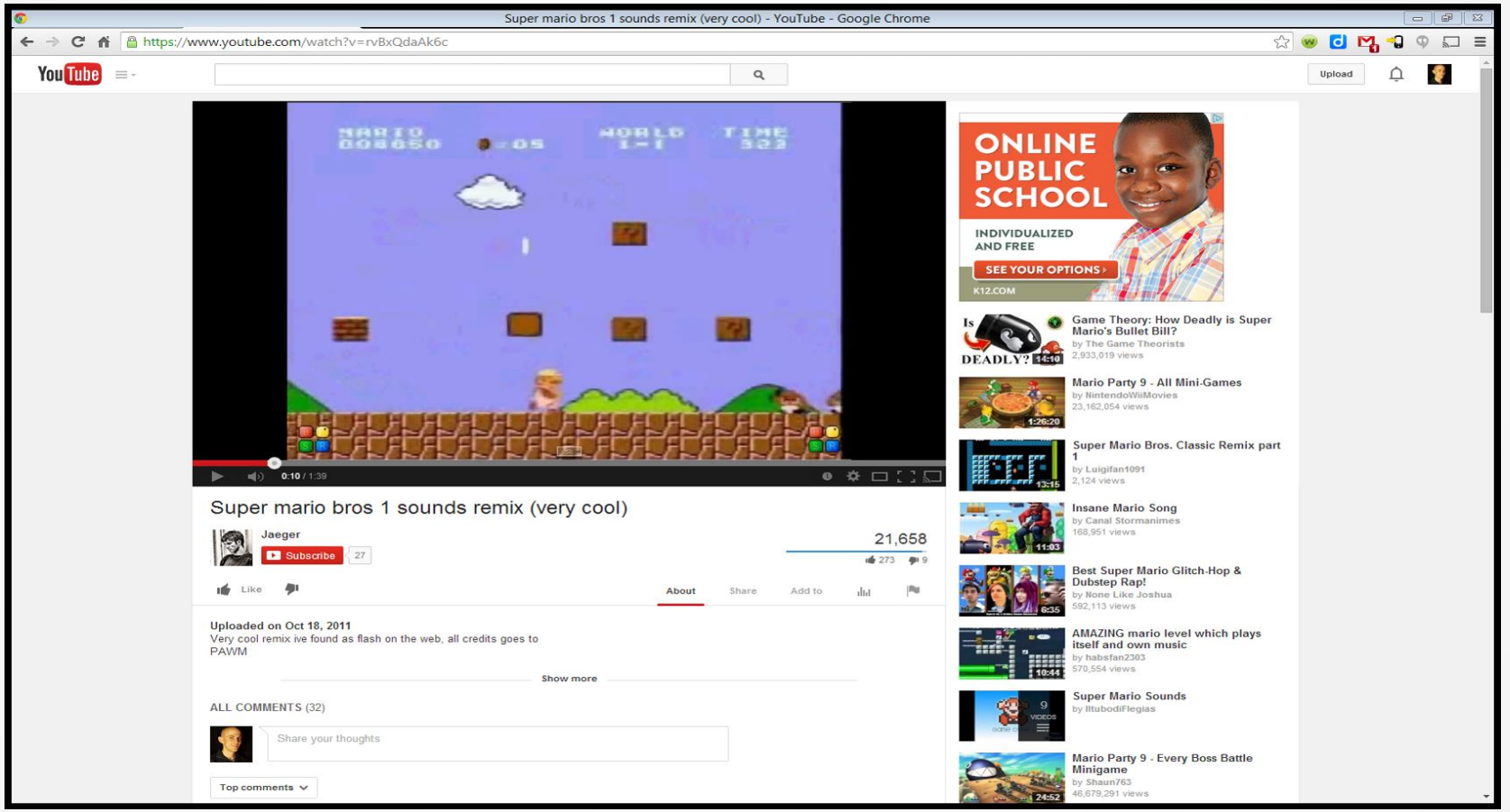

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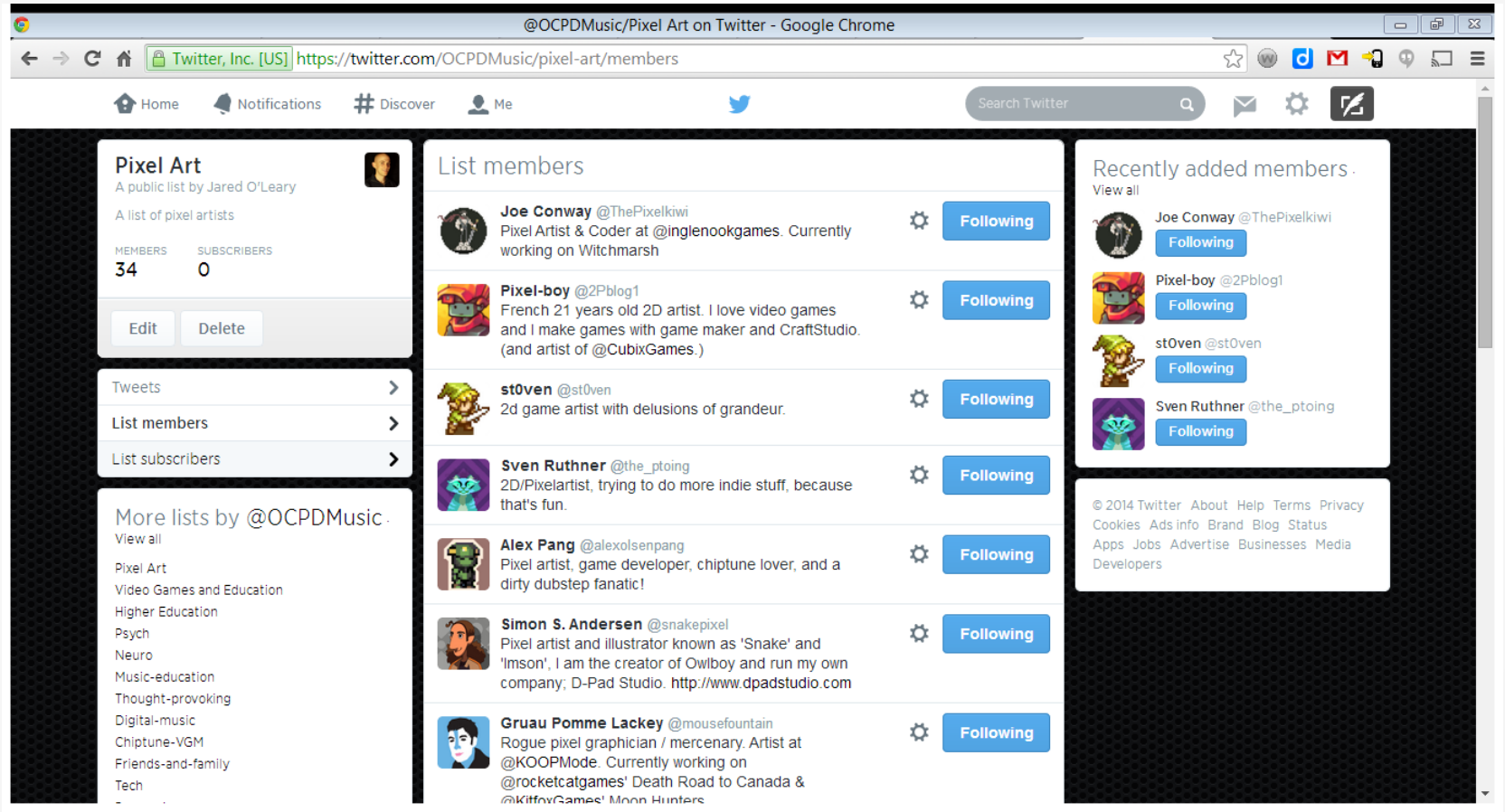
Pixel art:
Pixel artists



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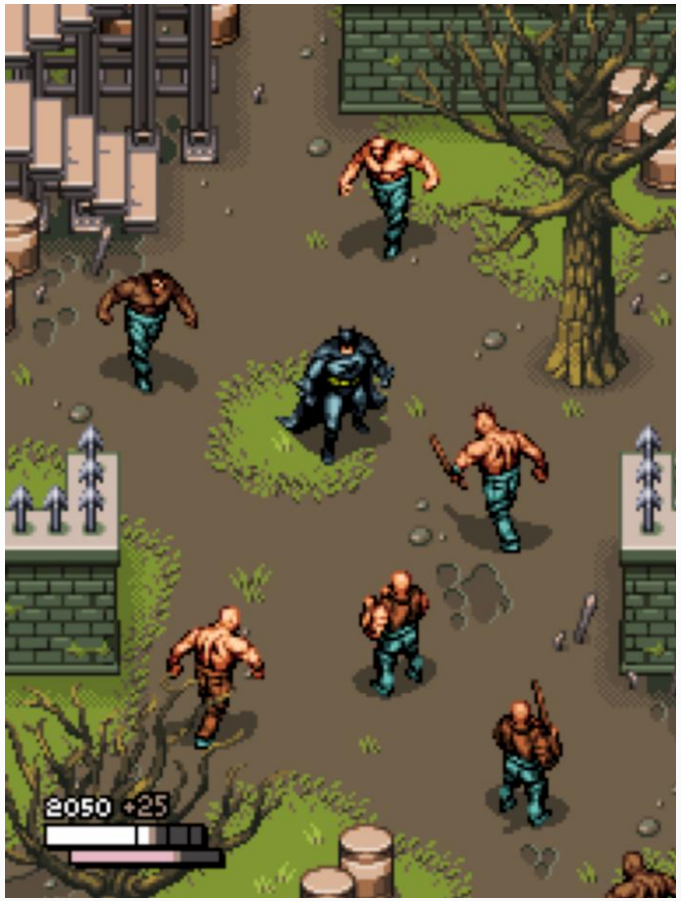
Pixel art:
Batman Arkham Asylum



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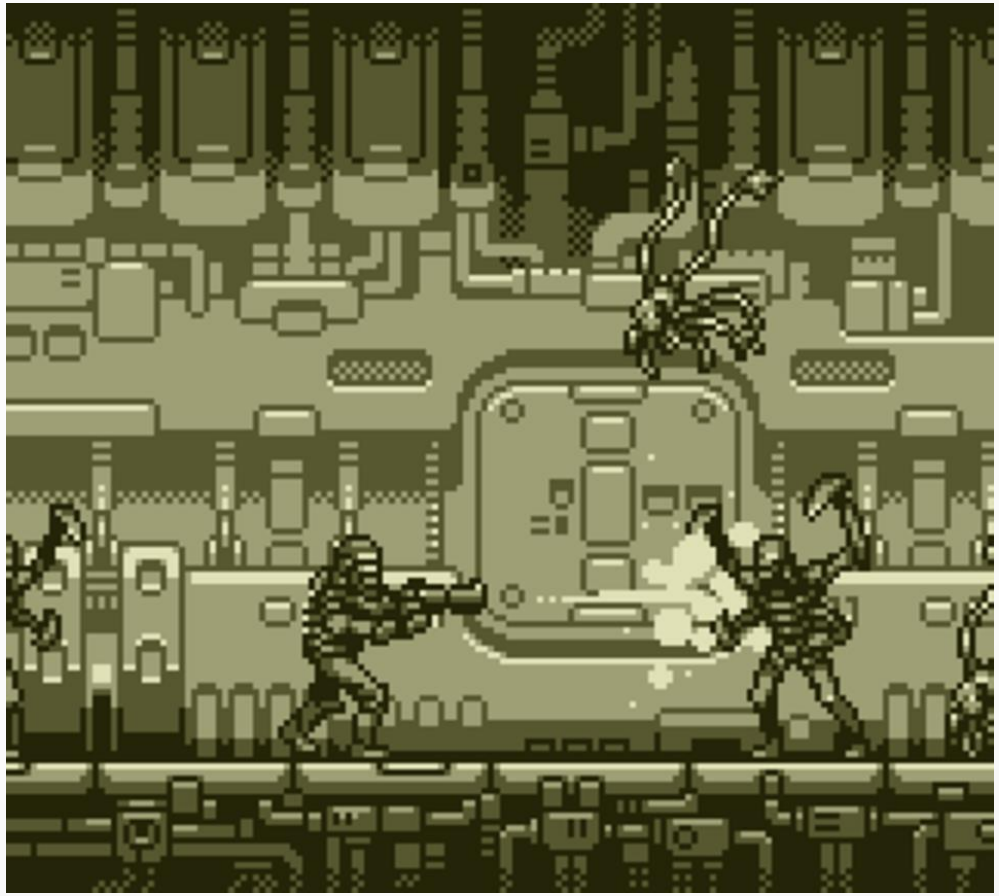
Pixel art:
Dead Space



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Pixel art:
Final Fantasy XIII

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Pixel art:
Guitar Hero

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Pixel art: Killzone

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Pixel art:
Left 4 Dead

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Pixel art:
Mario Galaxy

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Pixel art:
Mirrors Edge

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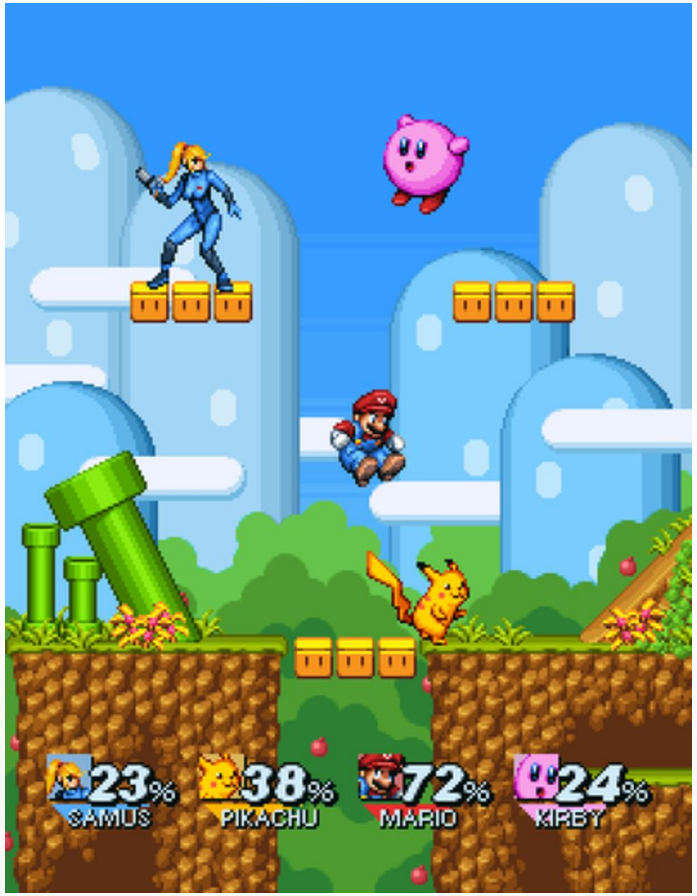
Pixel art:
Super Smash Bros



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Pixel art: Uncharted

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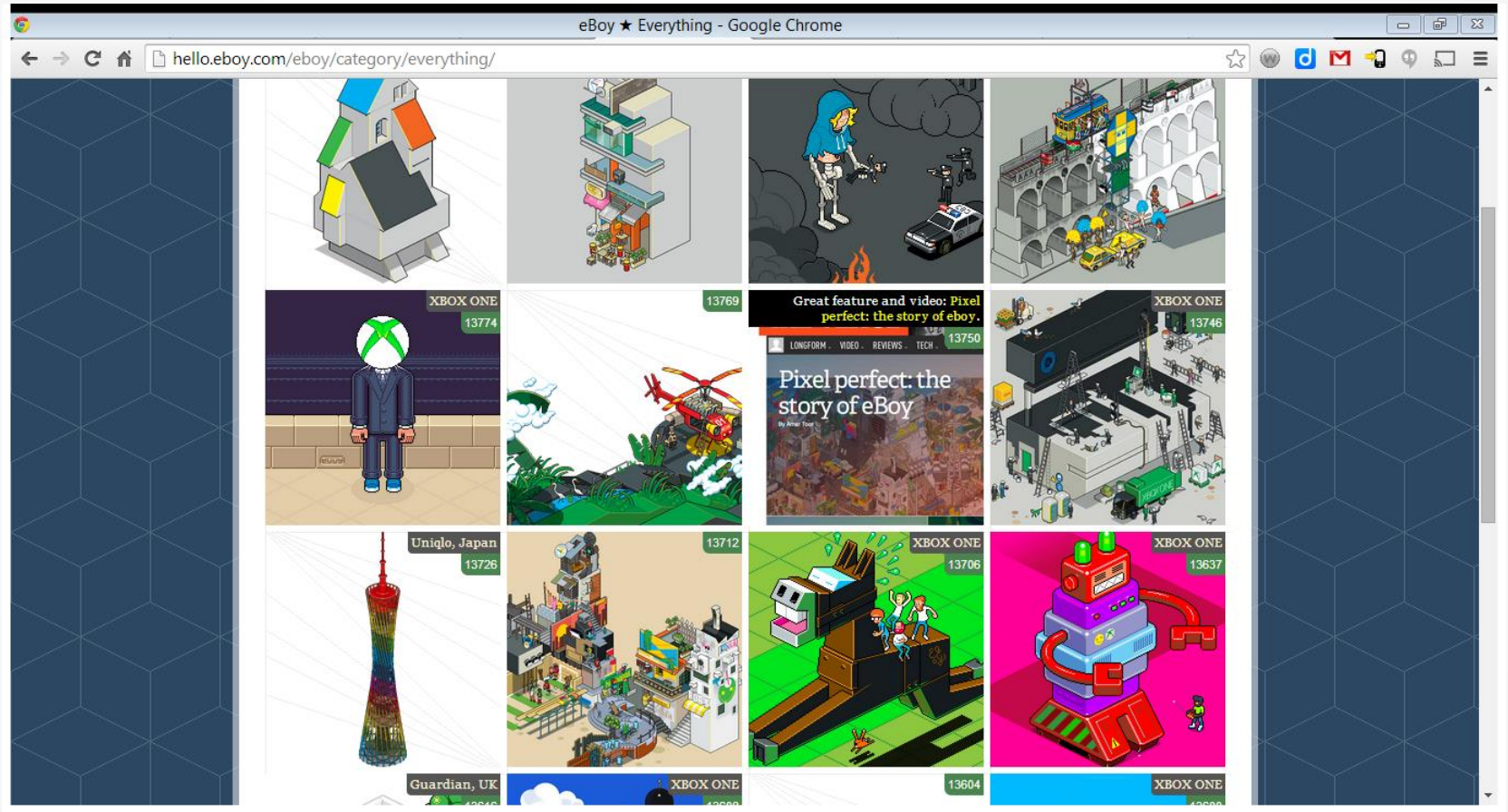
Pixel art: Posters



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Pixel art: Scenery

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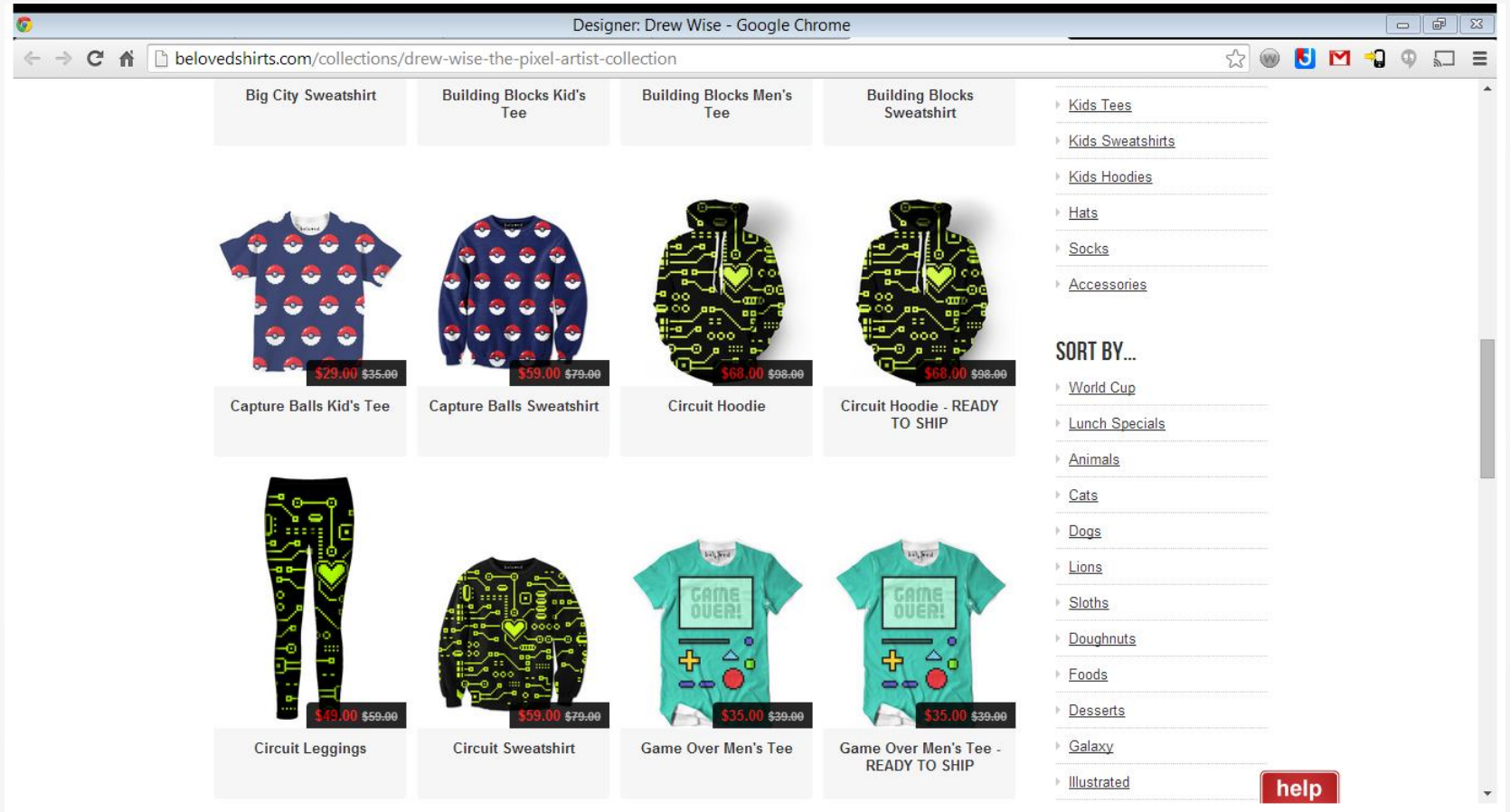
Pixel art: Textiles



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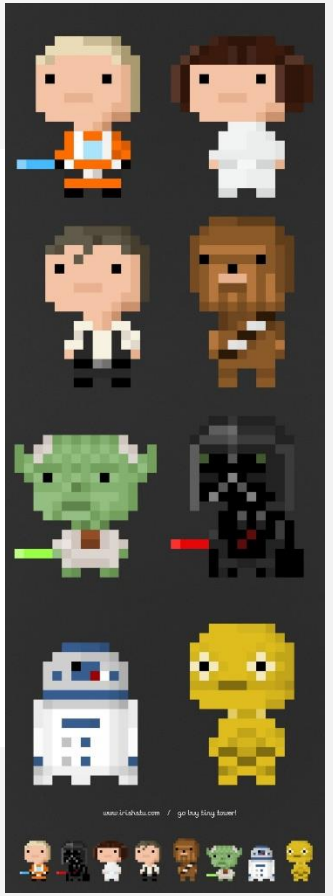
Pixel art:
Pop culture



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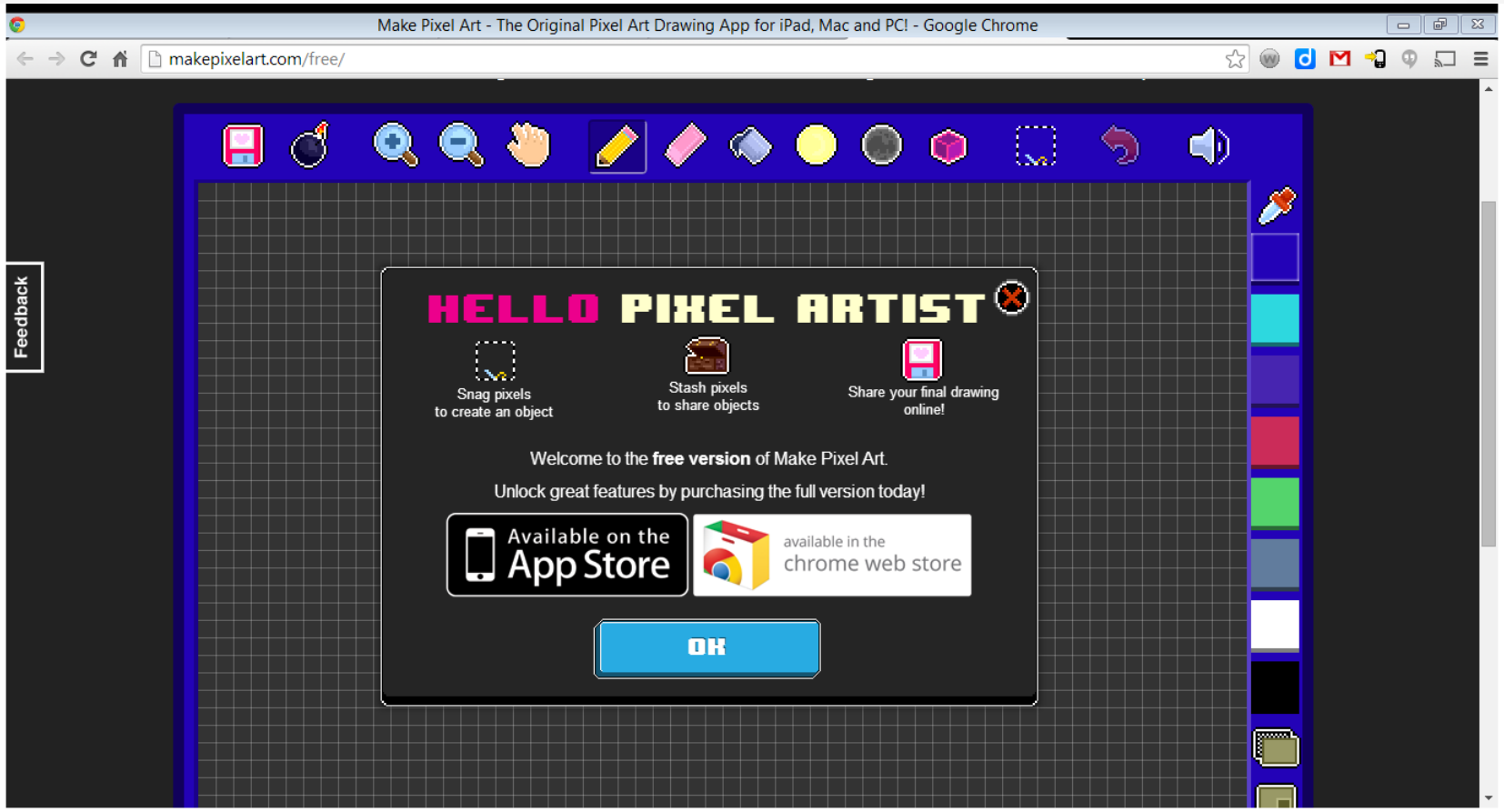
Pixel art:
Free and easy to use



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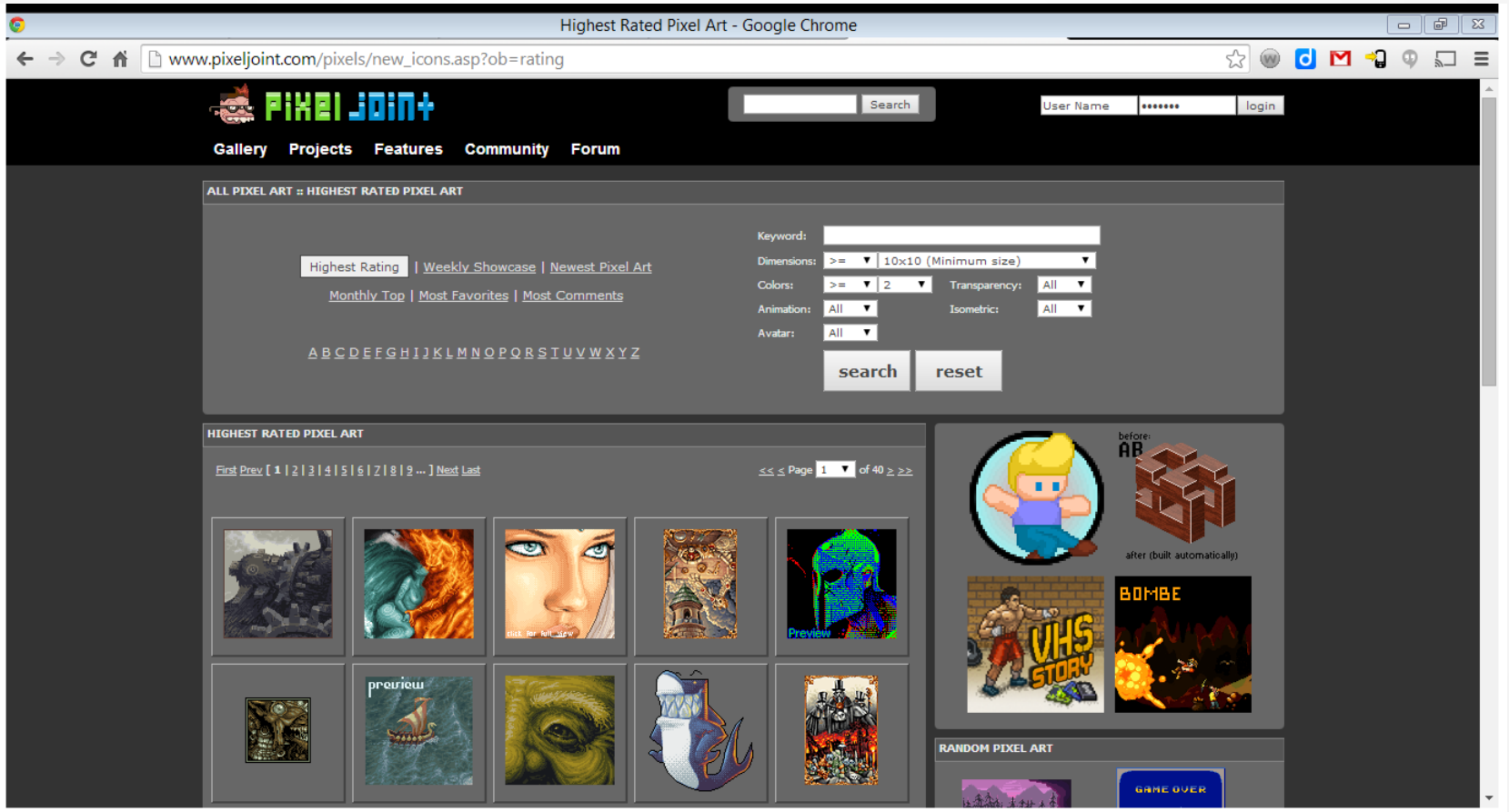
Pixel art: Communities



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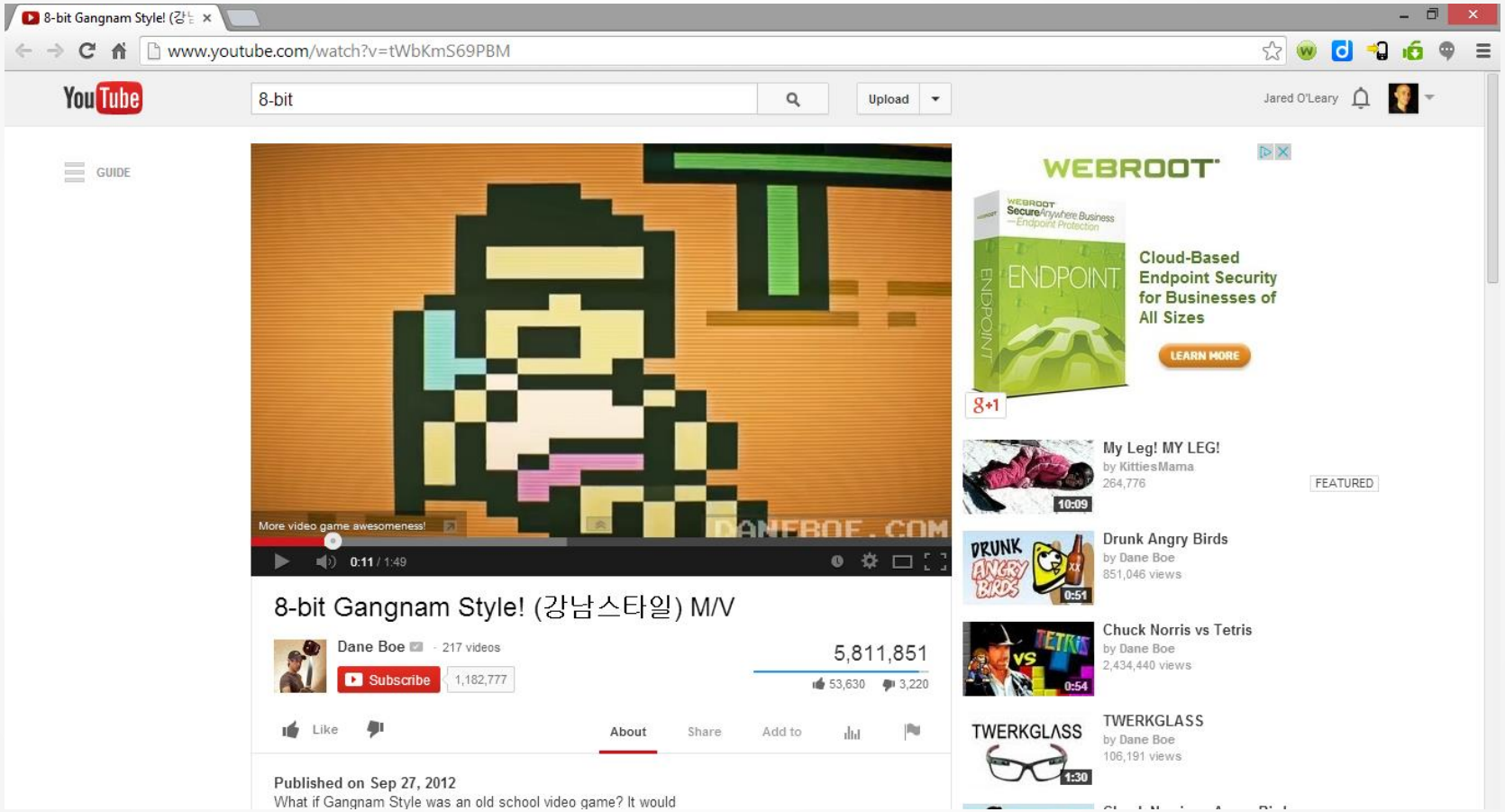
8-bit media: Music videos



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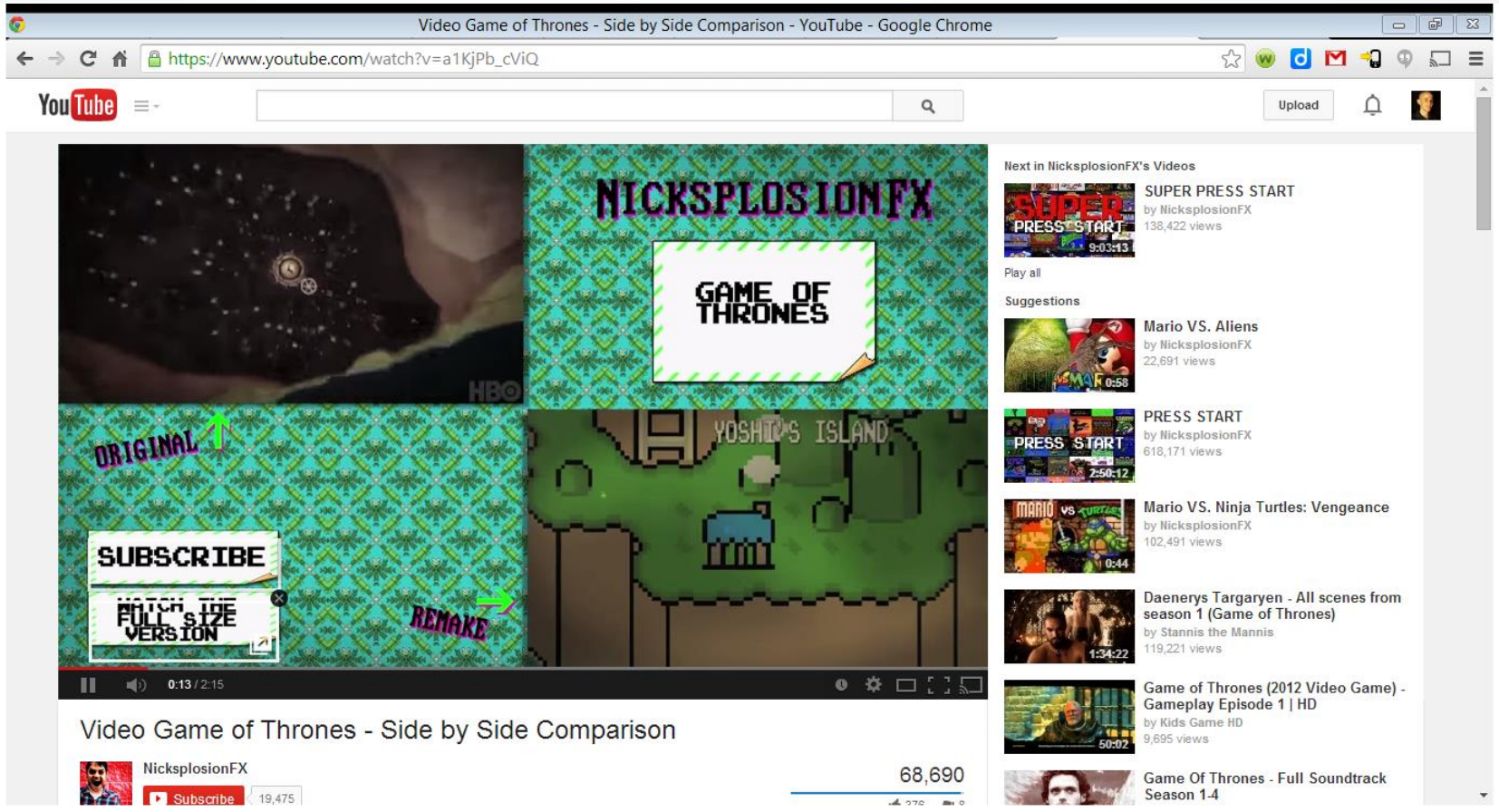
8-bit media:
TV show credits



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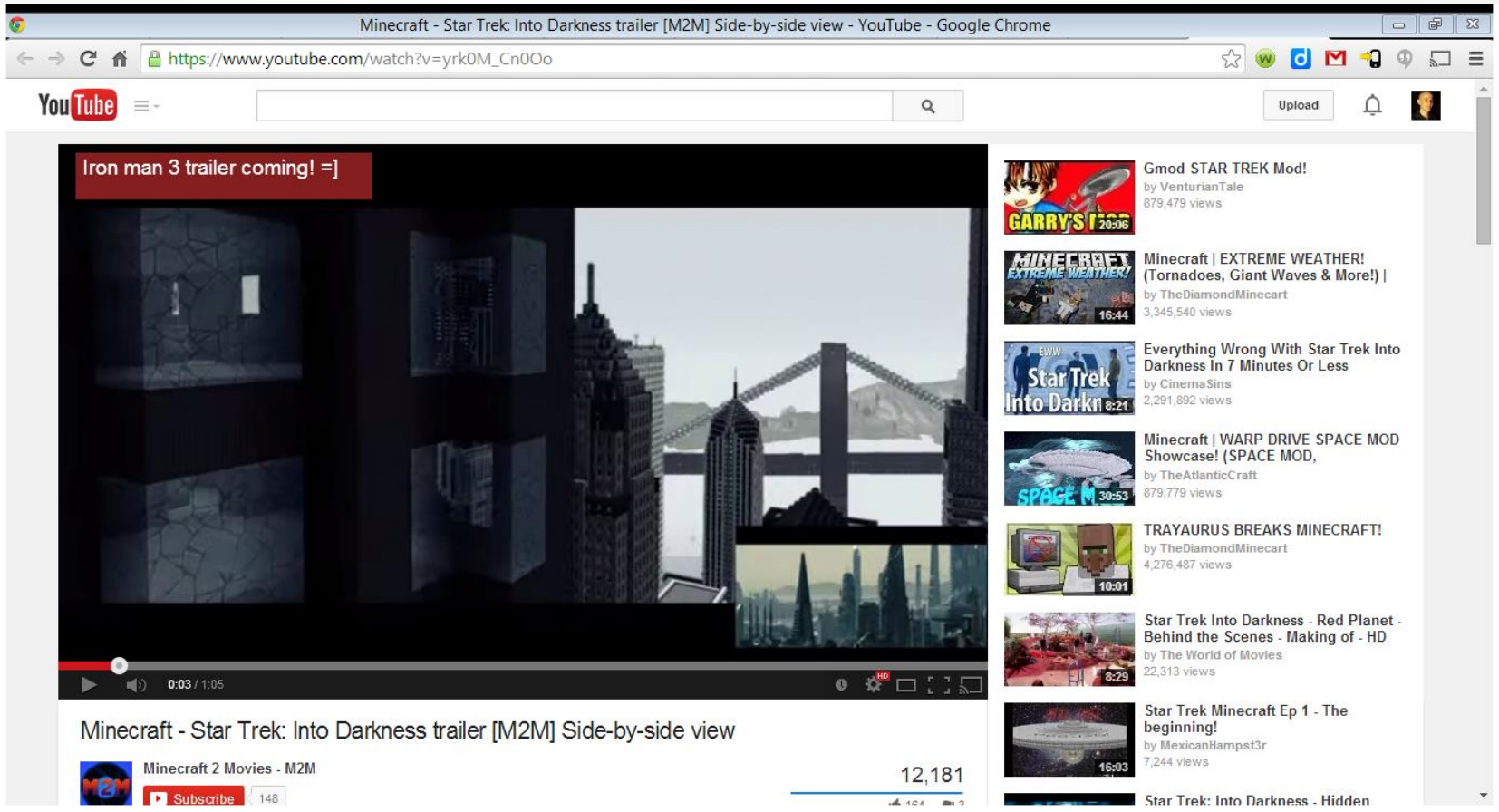
8-bit media: Movie trailers



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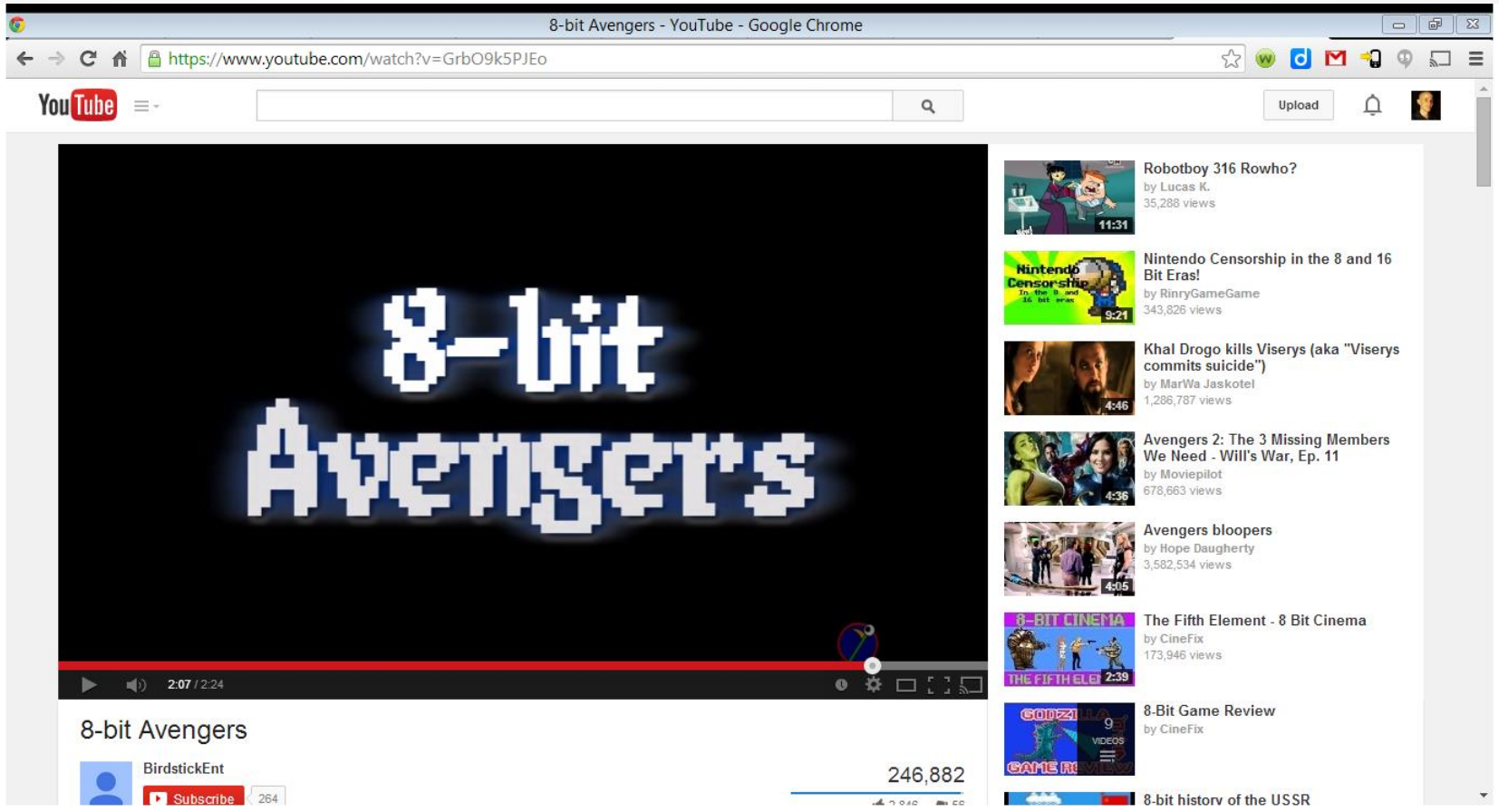

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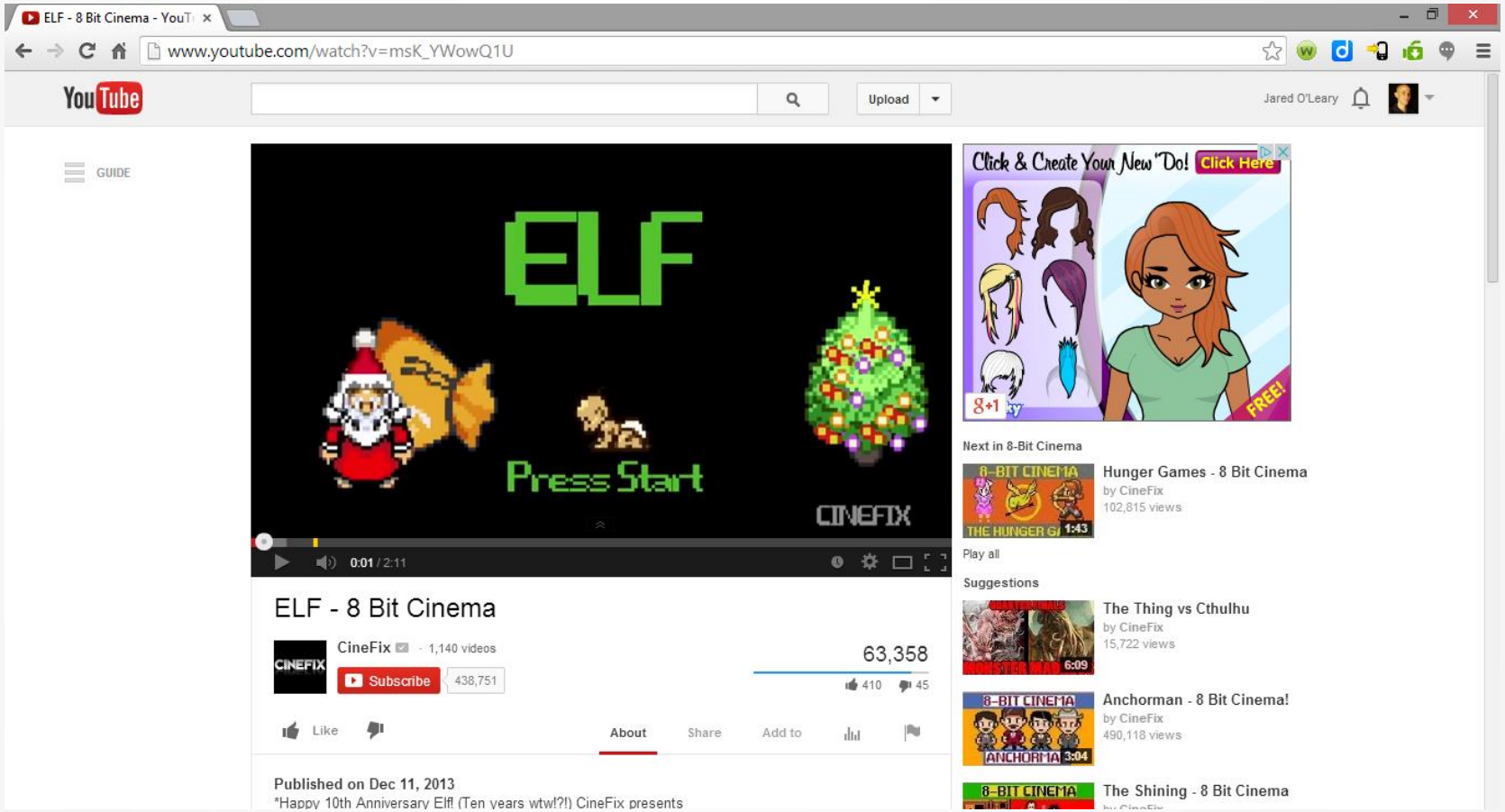
8-bit media: Movies



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Further discussion and questions

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