

# WavMakr: Al Music Generation

#### **Meet The Team**





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### The Problem



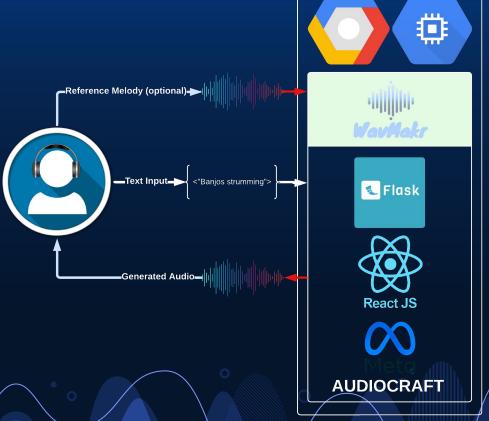
- Music production is hard, and existing software is intimidating and inaccessible:
  - User 1: "Learning how to use a [Digital Audio Workstation] is already time-consuming enough and learning all the other tooling takes even longer"
  - User 2: "I can hear the beat in my head, but translating that into something tangible on my computer is often frustrating"
  - User 3: "[Digital Audio Workstations] are way too expensive and any other products that I wanted to use, I also had to pay for."

# **Product Demo**



### **Technical Discussion:**

- Step 1: User enters prompt
  - May include reference Melody
- Step 2: Prompt and Music
  Sample sent to AudioCraft
  MusicGen Model
- Step 3: Generated Audio is outputted



### The Model

- MusicGen, engineered by Audiocraft
- Trained with 10K high-quality music tracks,
  ShutterStock and Pond5 music data
- We used a pre-trained version of MusicGen that has
  1.5 Billion parameters and can utilize uploaded melodies along with prompts to generate up to 15
  seconds of music

**AUDIO OUTPUT ENCODEC** TOKEN DECODER Conv block Conv block **DECODER LM** Conv block Transformer Transformer Transformer Transformer Transforme Text Embedding RVQ (n, = 4) Transforme Transforme Transforme Conv block Conv block TEXT **ENCODER ENCODEC WAV ENCODER** 90s rock sona with electric guitar and heavy drums AUDIO INPUT **TEXT INPUT** 

Source/

https://github.com/facebookresearch/audiocraft/blob/main/docs/MUSICGEN.md

## Target Users

#### WavMakr is ideal for:

- Amateur Musicians and Hobbyists
- Educational Institutions
- Podcasters and Content Creators
- Tech-savvy Music Enthusiasts



### **Competition & Potential Impact of Our Target Users:**

- Current Market: Lots of Options, but in early development and rough
  - ~60% of independent musicians use AI for music generation
  - Big music production software such as Ableton, FLStudio, etc.
  - Up and Coming Generative AI such as Fadr AI
- Customer Testimonials:
  - User 1: "I'd pay up around \$200 if it genuinely helped production"
  - User 2: "It would definitely improve the [Music Production] experience"
  - User 3: "This would definitely speed things up."



### **Future Plans**



- Monetization: Subscription Service or Ads
- Technical:
  - Implement a Recommender System for Similar Music
  - Optimization: More cost effective, faster running time
  - Improvement of UI with A/B Testing
  - Fine tuning of Model



### **Conclusion & Make Takeaways**

- Mission: Find musical inspiration with the power of Al
- Product allows user to input a prompt and get a musical sample as the output
- Further functionality to be implemented when more funding is raised
- Will provide substantial benefit to aspiring music producers of all backgrounds and levels



