
Awesome Talking Face

This is a repository for organizing papres, codes and other resources related to talking face/head. Most papers are linked to the pdf address provided by “arXiv” or “OpenAccess”. However, some papers require an academic license to browse. For example, IEEE, springer, and elsevier journal, etc.

:high_brightness: This project is still on-going, pull requests are welcomed!! If you have any suggestions (missing papers, new papers, key researchers or typos), please feel free to edit and pull a request. Just letting me know the title of papers can also be a big contribution to me. You can do this by open issue or contact me directly via email.

:star: If you find this repo useful, please star it!!!

2022.09 Update! Thanks for PR from everybody! From now on, I’ll occasionally include some papers about **video-driven** talking face generation. Because I found that the community is trying to include the **video-driven** methods into the talking face generation scope, though it is originally termed as **Face Reenactment**.

So, if you are looking for **video-driven talking face generation**, I would suggest you have a star here, and go to search Face Reenactment, you’ll find more :)

One more thing, please correct me if you find that there are any paper noted as arXiv paper has been accepted to some conferences or journals.

2021.11 Update! I updated a batch of papers that appeared in the past few months. In this repo, I was intend to cover the **audio-driven** talking face generation works. However, I found several **text-based** research works are also very interesting. So I included them here. Enjoy it!

TO DO LIST

- ☒ Main paper list
- ☒ Add paper link
- ☒ Add codes if have
- ☒ Add project page if have
- ☒ Datasets and survey

Papers

2D Video - Person independent

2024

- MuseTalk: Real-Time High Quality Lip Synchorization with Latent Space Inpainting Code [Tech report on the way]
- VASA-1: Lifelike Audio-Driven Talking Faces Generated in Real Time [arXiv 2024] Paper Project-Page
- THQA: A Perceptual Quality Assessment Database for Talking Heads [arXiv 2024] Paper Code
- Talk3D: High-Fidelity Talking Portrait Synthesis via Personalized 3D Generative Prior [arXiv 2024] Paper Code ProjectPage
- EDTalk: Efficient Disentanglement for Emotional Talking Head Synthesis [arXiv 2024] Paper Code ProjectPage
- AniPortrait: Audio-Driven Synthesis of Photorealistic Portrait Animations [arXiv 2024] Paper Code
- MoDiTalker: Motion-Disentangled Diffusion Model for High-Fidelity Talking Head Generation [arXiv 2024] Paper ProjectPage
- Superior and Pragmatic Talking Face Generation with Teacher-Student Framework [arXiv 2024] Paper ProjectPage
- X-Portrait: Expressive Portrait Animation with Hierarchical Motion Attention [arXiv 2024] Paper
- Adaptive Super Resolution For One-Shot Talking-Head Generation [arXiv 2024] Paper
- Style2Talker: High-Resolution Talking Head Generation with Emotion Style and Art Style [arXiv 2024] Paper
- FlowVQTalker: High-Quality Emotional Talking Face Generation through Normalizing Flow and Quantization [arXiv 2024] Paper
- FaceChain-ImagineID: Freely Crafting High-Fidelity Diverse Talking Faces from Disentangled Audio [arXiv 2024] Paper Code
- Learning Dynamic Tetrahedra for High-Quality Talking Head Synthesis [CVPR 2024] Paper Code
- EMO: Emote Portrait Alive - Generating Expressive Portrait Videos with Audio2Video Diffusion Model under Weak Conditions [arXiv 2024] Paper ProjectPage Code
- G4G:A Generic Framework for High Fidelity Talking Face Generation with Fine-grained Intra-modal Alignment [arXiv 2024] Paper
- Context-aware Talking Face Video Generation [arXiv 2024] Paper
- EmoSpeaker: One-shot Fine-grained Emotion-Controlled Talking Face Generation [arXiv 2024] Paper ProjectPage Code
- GPAvatar: Generalizable and Precise Head Avatar from Image(s) [ICLR 2024] Paper Code
- Real3D-Portrait: One-shot Realistic 3D Talking Portrait Synthesis [ICLR 2024] Paper

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- EmoTalker: Emotionally Editable Talking Face Generation via Diffusion Model [ICASSP 2024] Paper
 - CVTHead: One-shot Controllable Head Avatar with Vertex-feature Transformer [WACV 2024] Paper Code

2023

- VectorTalker: SVG Talking Face Generation with Progressive Vectorisation [arXiv 2023] Paper
- DreamTalk: When Expressive Talking Head Generation Meets Diffusion Probabilistic Models [arXiv 2023] Paper ProjectPage
- GMTalker: Gaussian Mixture based Emotional talking video Portraits [arXiv 2023] Paper ProjectPage
- DiT-Head: High-Resolution Talking Head Synthesis using Diffusion Transformers [arXiv 2023] Paper
- R2-Talker: Realistic Real-Time Talking Head Synthesis with Hash Grid Landmarks Encoding and Progressive Multilayer Conditioning [arXiv 2023] Paper
- FT2TF: First-Person Statement Text-To-Talking Face Generation [arXiv 2023] Paper
- VividTalk: One-Shot Audio-Driven Talking Head Generation Based on 3D Hybrid Prior [arXiv 2023] Paper Code ProjectPage
- SyncTalk: The Devil is in the Synchronization for Talking Head Synthesis [arXiv 2023] Paper Code ProjectPage
- GAIA: Zero-shot Talking Avatar Generation [arXiv 2023] Paper
- Efficient Region-Aware Neural Radiance Fields for High-Fidelity Talking Portrait Synthesis [ICCV 2023] Paper ProjectPage Code
- Implicit Identity Representation Conditioned Memory Compensation Network for Talking Head Video Generation [ICCV 2023] Paper ProjectPage Code
- MODA: Mapping-Once Audio-driven Portrait Animation with Dual Attentions [ICCV 2023] Paper ProjectPage
- ToonTalker: Cross-Domain Face Reenactment [ICCV 2023] Paper
- Efficient Emotional Adaptation for Audio-Driven Talking-Head Generation [ICCV 2023] Paper ProjectPage Code
- EMMN: Emotional Motion Memory Network for Audio-driven Emotional Talking Face Generation [ICCV 2023] Paper
- Emotional Listener Portrait: Realistic Listener Motion Simulation in Conversation [ICCV 2023] Paper
- Instruct-NeuralTalker: Editing Audio-Driven Talking Radiance Fields with Instructions [arXiv 2023] Paper
- Plug the Leaks: Advancing Audio-driven Talking Face Generation by Preventing Unintended In-

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- formation Flow [arXiv 2023] Paper
- Reprogramming Audio-driven Talking Face Synthesis into Text-driven [arXiv 2023] Paper
 - Audio-Driven Dubbing for User Generated Contents via Style-Aware Semi-Parametric Synthesis [TCSVT 2023] Paper
 - Emotional Talking Head Generation based on Memory-Sharing and Attention-Augmented Networks [arXiv 2023] Paper
 - Ada-TTA: Towards Adaptive High-Quality Text-to-Talking Avatar Synthesis [arXiv 2023] Paper
 - SadTalker: Learning Realistic 3D Motion Coefficients for Stylized Audio-Driven Single Image Talking Face Animation [CVPR 2023] Paper Code
 - MetaPortrait: Identity-Preserving Talking Head Generation with Fast Personalized Adaptation [CVPR 2023] Paper ProjectPage Code
 - Implicit Neural Head Synthesis via Controllable Local Deformation Fields [CVPR 2023] Paper
 - LipFormer: High-fidelity and Generalizable Talking Face Generation with A Pre-learned Facial Codebook [CVPR 2023] Paper
 - GANHead: Towards Generative Animatable Neural Head Avatars [CVPR 2023] Paper ProjectPage Code
 - Parametric Implicit Face Representation for Audio-Driven Facial Reenactment [CVPR 2023] Paper
 - Identity-Preserving Talking Face Generation with Landmark and Appearance Priors [CVPR 2023] Paper Code
 - StyleSync: High-Fidelity Generalized and Personalized Lip Sync in Style-based Generator [CVPR 2023] Paper ProjectPage Code
 - Avatar Fingerprinting for Authorized Use of Synthetic Talking-Head Videos [arXiv 2023] Paper ProjectPage
 - Multimodal-driven Talking Face Generation, Face Swapping, Diffusion Model [arXiv 2023] Paper
 - High-fidelity Generalized Emotional Talking Face Generation with Multi-modal Emotion Space Learning [CVPR 2023] Paper
 - StyleLipSync: Style-based Personalized Lip-sync Video Generation [arXiv 2023] Paper ProjectPage Code
 - GeneFace++: Generalized and Stable Real-Time Audio-Driven 3D Talking Face Generation [arXiv 2023] Paper ProjectPage
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 - One-Shot High-Fidelity Talking-Head Synthesis with Deformable Neural Radiance Field [CVPR 2023] Paper ProjectPage
 - Seeing What You Said: Talking Face Generation Guided by a Lip Reading Expert [CVPR 2023] Paper Code
 - Audio-Driven Talking Face Generation with Diverse yet Realistic Facial Animations [arXiv 2023]
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Paper

- That's What I Said: Fully-Controllable Talking Face Generation [arXiv 2023] Paper ProjectPage
- Emotionally Enhanced Talking Face Generation [arXiv 2023] Paper Code ProjectPage
- A Unified Compression Framework for Efficient Speech-Driven Talking-Face Generation [MLSys Workshop 2023] Paper
- TalkCLIP: Talking Head Generation with Text-Guided Expressive Speaking Styles [arXiv 2023] Paper
- FONT: Flow-guided One-shot Talking Head Generation with Natural Head Motions [ICME 2023] Paper
- DAE-Talker: High Fidelity Speech-Driven Talking Face Generation with Diffusion Autoencoder [arXiv 2023] Paper ProjectPage
- OPT: ONE-SHOT POSE-CONTROLLABLE TALKING HEAD GENERATION [ICASSP 2023] Paper
- DisCoHead: Audio-and-Video-Driven Talking Head Generation by Disentangled Control of Head Pose and Facial Expressions [ICASSP 2023] Paper Code ProjectPage
- GeneFace: Generalized and High-Fidelity Audio-Driven 3D Talking Face Synthesis [ICLR 2023] Paper Code ProjectPage
- OTAvatar : One-shot Talking Face Avatar with Controllable Tri-plane Rendering [CVPR 2023] Paper Code
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- Style Transfer for 2D Talking Head Animation [arXiv 2023] Paper
- READ Avatars: Realistic Emotion-controllable Audio Driven Avatars [arXiv 2023] Paper
- On the Audio-visual Synchronization for Lip-to-Speech Synthesis [arXiv 2023] Paper
- DiffTalk: Crafting Diffusion Models for Generalized Talking Head Synthesis [CVPR 2023] Paper
- Diffused Heads: Diffusion Models Beat GANs on Talking-Face Generation [arXiv 2023] Paper ProjectPage
- StyleTalk: One-shot Talking Head Generation with Controllable Speaking Styles [AAAI 2023] Paper Code
- Audio-Visual Face Reenactment [WACV 2023] Paper ProjectPage Code

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- Memories are One-to-Many Mapping Alleviators in Talking Face Generation [arXiv 2022] Paper ProjectPage
- Masked Lip-Sync Prediction by Audio-Visual Contextual Exploitation in Transformers [SIGGRAPH Asia 2022] Paper
- Talking Head Generation with Probabilistic Audio-to-Visual Diffusion Priors [arXiv 2022] Paper ProjectPage
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- Synthesis [CVPR 2022] Paper ProjectPage
- SPACE: Speech-driven Portrait Animation with Controllable Expression [arXiv 2022] Paper ProjectPage
 - Compressing Video Calls using Synthetic Talking Heads [BMVC 2022] Paper Project Page
 - Synthesizing Photorealistic Virtual Humans Through Cross-modal Disentanglement [arXiv 2022] Paper
 - StyleTalker: One-shot Style-based Audio-driven Talking Head Video Generation [arXiv 2022] Paper
 - Free-HeadGAN: Neural Talking Head Synthesis with Explicit Gaze Control [arXiv 2022] Paper
 - EAMM: One-Shot Emotional Talking Face via Audio-Based Emotion-Aware Motion Model [SIGGRAPH 2022] Paper
 - Talking Head from Speech Audio using a Pre-trained Image Generator [ACM MM 2022] Paper
 - Latent Image Animator: Learning to Animate Images via Latent Space Navigation [ICLR 2022] Paper ProjectPage(note this page has auto-play music...) Code
 - Real-time Neural Radiance Talking Portrait Synthesis via Audio-spatial Decomposition [arXiv 2022] Paper ProjectPage Code
 - Learning Dynamic Facial Radiance Fields for Few-Shot Talking Head Synthesis [ECCV 2022] Paper ProjectPage Code
 - Semantic-Aware Implicit Neural Audio-Driven Video Portrait Generation [ECCV 2022] Paper ProjectPage Code
 - Text2Video: Text-driven Talking-head Video Synthesis with Phonetic Dictionary [ICASSP 2022] Paper ProjectPage Code
 - StableFace: Analyzing and Improving Motion Stability for Talking Face Generation [arXiv 2022] Paper ProjectPage
 - Emotion-Controllable Generalized Talking Face Generation [IJCAI 2022] Paper
 - StyleHEAT: One-Shot High-Resolution Editable Talking Face Generation via Pre-trained StyleGAN [arXiv 2022] Paper Code ProjectPage
 - DFA-NeRF: Personalized Talking Head Generation via Disentangled Face Attributes Neural Rendering [arXiv 2022] Paper
 - Dynamic Neural Textures: Generating Talking-Face Videos with Continuously Controllable Expressions [arXiv 2022] Paper
 - Audio-Driven Talking Face Video Generation with Dynamic Convolution Kernels [TMM 2022] Paper
 - Depth-Aware Generative Adversarial Network for Talking Head Video Generation [CVPR 2022] Paper ProjectPage Code
 - Show Me What and Tell Me How: Video Synthesis via Multimodal Conditioning [CVPR 2022] Paper Code ProjectPage
 - Depth-Aware Generative Adversarial Network for Talking Head Video Generation [CVPR 2022]
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- Expressive Talking Head Generation with Granular Audio-Visual Control [CVPR 2022] Paper
- Talking Face Generation with Multilingual TTS [CVPR 2022 Demo] Paper DemoPage
- SyncTalkFace: Talking Face Generation with Precise Lip-syncing via Audio-Lip Memory [AAAI 2022] Paper

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- Live Speech Portraits: Real-Time Photorealistic Talking-Head Animation [SIGGRAPH Asia 2021] Paper Code
- Imitating Arbitrary Talking Style for Realistic Audio-Driven Talking Face Synthesis [ACMMM 2021] Paper Code
- AD-NeRF: Audio Driven Neural Radiance Fields for Talking Head Synthesis [ICCV 2021] Paper Code
- FACIAL: Synthesizing Dynamic Talking Face with Implicit Attribute Learning [ICCV 2021] Paper Code
- Learned Spatial Representations for Few-shot Talking-Head Synthesis [ICCV 2021] Paper
- Pose-Controllable Talking Face Generation by Implicitly Modularized Audio-Visual Representation [CVPR 2021] Paper Code ProjectPage
- One-Shot Free-View Neural Talking-Head Synthesis for Video Conferencing [CVPR 2021] Paper
- Audio-Driven Emotional Video Portraits [CVPR 2021] Paper Code
- AnyoneNet: Synchronized Speech and Talking Head Generation for Arbitrary Person [arXiv 2021] Paper
- Talking Head Generation with Audio and Speech Related Facial Action Units [BMVC 2021] Paper
- Audio2Head: Audio-driven One-shot Talking-head Generation with Natural Head Motion [IJCAI 2021] Paper
- Write-a-speaker: Text-based Emotional and Rhythmic Talking-head Generation [AAAI 2021] Paper
- Text2Video: Text-driven Talking-head Video Synthesis with Phonetic Dictionary [arXiv 2021] Paper Code

2020

- Audio-driven Talking Face Video Generation with Learning-based Personalized Head Pose [arXiv 2020] Paper Code
- A Lip Sync Expert Is All You Need for Speech to Lip Generation In the Wild [ACMMM 2020] Paper Code

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- Talking Face Generation with Expression-Tailored Generative Adversarial Network [ACMMM 2020] Paper
 - Speech Driven Talking Face Generation from a Single Image and an Emotion Condition [arXiv 2020] Paper Code
 - A Neural Lip-Sync Framework for Synthesizing Photorealistic Virtual News Anchors [ICPR 2020] Paper
 - Everybody's Talkin': Let Me Talk as You Want [arXiv 2020] Paper
 - HeadGAN: Video-and-Audio-Driven Talking Head Synthesis [arXiv 2020] Paper
 - Talking-head Generation with Rhythmic Head Motion [ECCV 2020] Paper
 - Neural Voice Puppetry: Audio-driven Facial Reenactment [ECCV 2020] Paper Project Code
 - Learning Individual Speaking Styles for Accurate Lip to Speech Synthesis [CVPR 2020] Paper
 - Robust One Shot Audio to Video Generation [CVPRW 2020] Paper
 - MakeltTalk: Speaker-Aware Talking Head Animation [SIGGRAPH Asia 2020] Paper Code
 - FLNet: Landmark Driven Fetching and Learning Network for Faithful Talking Facial Animation Synthesis. [AAAI 2020] Paper
 - Realistic Face Reenactment via Self-Supervised Disentangling of Identity and Pose [AAAI 2020] Paper
 - Photorealistic Lip Sync with Adversarial Temporal Convolutional [arXiv 2020] Paper
 - SPEECH-DRIVEN FACIAL ANIMATION USING POLYNOMIAL FUSION OF FEATURES [arXiv 2020] Paper
 - Animating Face using Disentangled Audio Representations [WACV 2020] Paper

Before 2020

- Realistic Speech-Driven Facial Animation with GANs. [IJCV 2019] Paper ProjectPage
- Few-Shot Adversarial Learning of Realistic Neural Talking Head Models [ICCV 2019] Paper Code
- Hierarchical Cross-Modal Talking Face Generation with Dynamic Pixel-Wise Loss [CVPR 2019] Paper Code
- Talking Face Generation by Adversarially Disentangled Audio-Visual Representation [AAAI 2019] Paper Code ProjectPage
- Lip Movements Generation at a Glance [ECCV 2018] Paper
- X2Face: A network for controlling face generation using images, audio, and pose codes [ECCV 2018] Paper Code ProjectPage
- Talking Face Generation by Conditional Recurrent Adversarial Network [IJCAI 2019] Paper Code
- Speech-Driven Facial Reenactment Using Conditional Generative Adversarial Networks [arXiv 2018] Paper
- High-Resolution Talking Face Generation via Mutual Information Approximation [arXiv 2018] Paper

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- Generative Adversarial Talking Head: Bringing Portraits to Life with a Weakly Supervised Neural Network [arXiv 2018] Paper
 - You said that? [BMVC 2017] Paper

2D Video - Person dependent

- Continuously Controllable Facial Expression Editing in Talking Face Videos [TAFFC 2023] Paper Project Page
- Synthesizing Obama: Learning Lip Sync from Audio [SIGGRAPH 2017] Paper Project Page
- PHOTOREALISTIC ADAPTATION AND INTERPOLATION OF FACIAL EXPRESSIONS USING HMMS AND AAMS FOR AUDIO-VISUAL SPEECH SYNTHESIS [ICIP 2017] Paper
- HMM-Based Photo-Realistic Talking Face Synthesis Using Facial Expression Parameter Mapping with Deep Neural Networks [Journal of Computer and Communications 2017] Paper
- ObamaNet: Photo-realistic lip-sync from text [arXiv 2017] Paper
- A deep bidirectional LSTM approach for video-realistic talking head [Multimedia Tools Appl 2015] Paper
- Photo-Realistic Expressive Text to Talking Head Synthesis [Interspeech 2013] Paper
- PHOTO-REAL TALKING HEAD WITH DEEP BIDIRECTIONAL LSTM [ICASSP 2015] Paper
- Expressive Speech-Driven Facial Animation [TOG 2005] Paper

3D Animation

- GaussianTalker: Speaker-specific Talking Head Synthesis via 3D Gaussian Splatting [arXiv 2024] Paper
- Learn2Talk: 3D Talking Face Learns from 2D Talking Face [arXiv 2024] Paper ProjectPage
- Beyond Talking – Generating Holistic 3D Human Dyadic Motion for Communication [arXiv 2024] Paper
- AnimateMe: 4D Facial Expressions via Diffusion Models [arXiv 2024] Paper
- EmoVOCA: Speech-Driven Emotional 3D Talking Heads [arXiv 2024] Paper
- FaceTalk: Audio-Driven Motion Diffusion for Neural Parametric Head Models [CVPR 2024] Paper Code ProjectPage
- AVI-Talking: Learning Audio-Visual Instructions for Expressive 3D Talking Face Generation [arXiv 2024] Paper
- Media2Face: Co-speech Facial Animation Generation With Multi-Modality Guidance [arXiv 2024] Paper ProjectPage
- EMOTE: Emotional Speech-Driven Animation with Content-Emotion Disentanglement [SIGGRAPH Asia 2023] Paper ProjectPage

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- PMMTalk: Speech-Driven 3D Facial Animation from Complementary Pseudo Multi-modal Features [arXiv] Paper
 - 3DiFACE: Diffusion-based Speech-driven 3D Facial Animation and Editing [arXiv 2023] Paper Code ProjectPage
 - Probabilistic Speech-Driven 3D Facial Motion Synthesis: New Benchmarks, Methods, and Applications [arXiv 2023] Paper
 - DiffusionTalker: Personalization and Acceleration for Speech-Driven 3D Face Diffuser [arXiv 2023] Paper
 - DiffPoseTalk: Speech-Driven Stylistic 3D Facial Animation and Head Pose Generation via Diffusion Models [arXiv 2023] Paper ProjectPage Code
 - Imitator: Personalized Speech-driven 3D Facial Animation [ICCV 2023] Paper ProjectPage Code
 - Speech4Mesh: Speech-Assisted Monocular 3D Facial Reconstruction for Speech-Driven 3D Facial Animation [ICCV 2023] Paper
 - Semi-supervised Speech-driven 3D Facial Animation via Cross-modal Encoding [ICCV 2023] Paper
 - Audio-Driven 3D Facial Animation from In-the-Wild Videos [arXiv 2023] Paper ProjectPage
 - EmoTalk: Speech-driven emotional disentanglement for 3D face animation [ICCV 2023] Paper ProjectPage
 - FaceXHuBERT: Text-less Speech-driven E(X)pressive 3D Facial Animation Synthesis Using Self-Supervised Speech Representation Learning [arXiv 2023] Paper Code ProjectPage
 - Pose-Controllable 3D Facial Animation Synthesis using Hierarchical Audio-Vertices Attention [arXiv 2023] Paper
 - Learning Audio-Driven Viseme Dynamics for 3D Face Animation [arXiv 2023] Paper ProjectPage
 - CodeTalker: Speech-Driven 3D Facial Animation with Discrete Motion Prior [CVPR 2023] Paper ProjectPage
 - Expressive Speech-driven Facial Animation with controllable emotions [arXiv 2023] Paper
 - Imitator: Personalized Speech-driven 3D Facial Animation [arXiv 2022] Paper ProjectPage
 - PV3D: A 3D Generative Model for Portrait Video Generation [arXiv 2022] Paper ProjectPage
 - Neural Emotion Director: Speech-preserving semantic control of facial expressions in “in-the-wild” videos [CVPR 2022] Paper Code
 - FaceFormer: Speech-Driven 3D Facial Animation with Transformers [CVPR 2022] Paper Code ProjectPage
 - LipSync3D: Data-Efficient Learning of Personalized 3D Talking Faces from Video using Pose and Lighting Normalization [CVPR 2021] Paper
 - MeshTalk: 3D Face Animation from Speech using Cross-Modality Disentanglement [ICCV 2021] Paper
 - AD-NeRF: Audio Driven Neural Radiance Fields for Talking Head Synthesis [ICCV 2021] Paper Code

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- 3D-TalkEmo: Learning to Synthesize 3D Emotional Talking Head [arXiv 2021] Paper
 - Modality Dropout for Improved Performance-driven Talking Faces [ICMI 2020] Paper
 - Audio- and Gaze-driven Facial Animation of Codec Avatars [arXiv 2020] Paper
 - Capture, Learning, and Synthesis of 3D Speaking Styles [CVPR 2019] Paper
 - VisemeNet: Audio-Driven Animator-Centric Speech Animation [TOG 2018] Paper
 - Speech-Driven Expressive Talking Lips with Conditional Sequential Generative Adversarial Networks [TAC 2018] Paper
 - End-to-end Learning for 3D Facial Animation from Speech [ICMI 2018] Paper
 - Visual Speech Emotion Conversion using Deep Learning for 3D Talking Head [MMAC 2018]
 - A Deep Learning Approach for Generalized Speech Animation [SIGGRAPH 2017] Paper
 - Audio-Driven Facial Animation by Joint End-to-End Learning of Pose and Emotion [TOG 2017] Paper
 - Speech-driven 3D Facial Animation with Implicit Emotional Awareness A Deep Learning Approach [CVPR 2017]
 - Expressive Speech Driven Talking Avatar Synthesis with DBLSTM using Limited Amount of Emotional Bimodal Data [Interspeech 2016] Paper
 - Real-Time Speech-Driven Face Animation With Expressions Using Neural Networks [TONN 2012] Paper
 - Facial Expression Synthesis Based on Emotion Dimensions for Affective Talking Avatar [SIST 2010] Paper

Datasets & Benchmark

- Responsive Listening Head Generation: A Benchmark Dataset and Baseline [ECCV 2022] Paper
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- TalkingHead-1KH Link
- MEAD: A Large-scale Audio-visual Dataset for Emotional Talking-face Generation [ECCV 2020]
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- VoxCeleb Link
- LRW Link
- LRS2 Link
- GRID Link
- CREMA-D Link
- MMFace4D Link
- DPCD Link Paper

Survey

- From Pixels to Portraits: A Comprehensive Survey of Talking Head Generation Techniques and Applications [arXiv 2023] Paper
- Deep Learning for Visual Speech Analysis: A Survey [arXiv 2022] Paper
- What comprises a good talking-head video generation?: A Survey and Benchmark [arXiv 2020] Paper

Colabs

- Avatars4All: <https://github.com/eyaler/avatars4all>