

# *Artimate*: an articulatory animation framework for audiovisual speech synthesis

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# Motion Capture

Face/Body Performance

# Motion Capture

Face/Body Performance



source: photobucket.com

# Motion Capture

## Face/Body Performance



source: photobucket.com



source: tumblr.com

# Motion Capture

## Speech

# Motion Capture

Speech



source: turbosquid.com

# Motion Capture

## Speech?



source: turbosquid.com



# Model Assembly

Static model & EMA

# Model Assembly

## Rigging

# Model Animation

## Skeleton

# Model Animation

## Surface

Introduction  
oo

Modelling  
oooo

Architecture  
●

Conclusion  
oo

# Architecture

# Architecture

*Artimate Model Compiler*

# Architecture

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*Artimate Core*

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*Artimate Model Compiler*

*Artimate Core*

*Artimate Demo App*

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*Artimate Model Compiler* ←→ 

*Artimate Core*

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*Artimate Demo App*

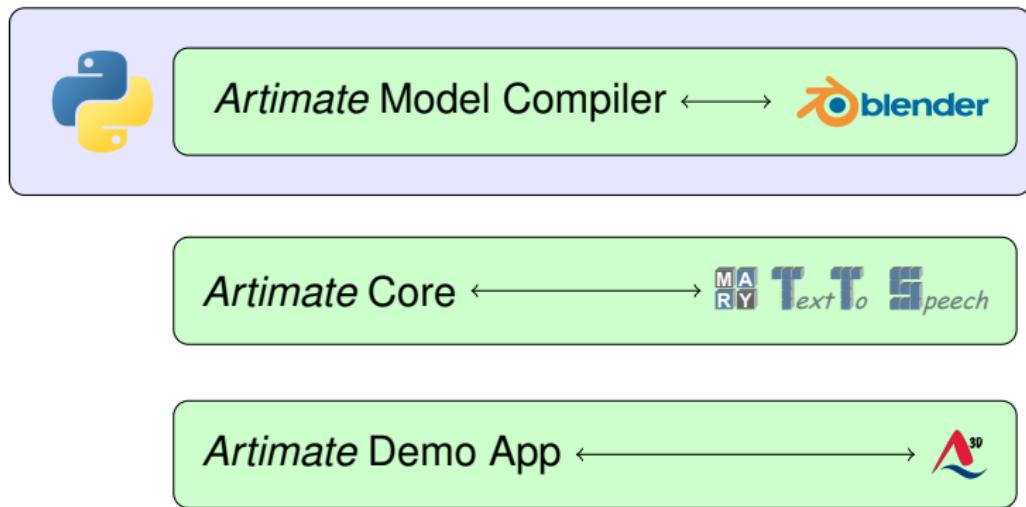
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*Artimate Model Compiler* ←→ 

*Artimate Core* ←→ 

*Artimate Demo App* ←→ 

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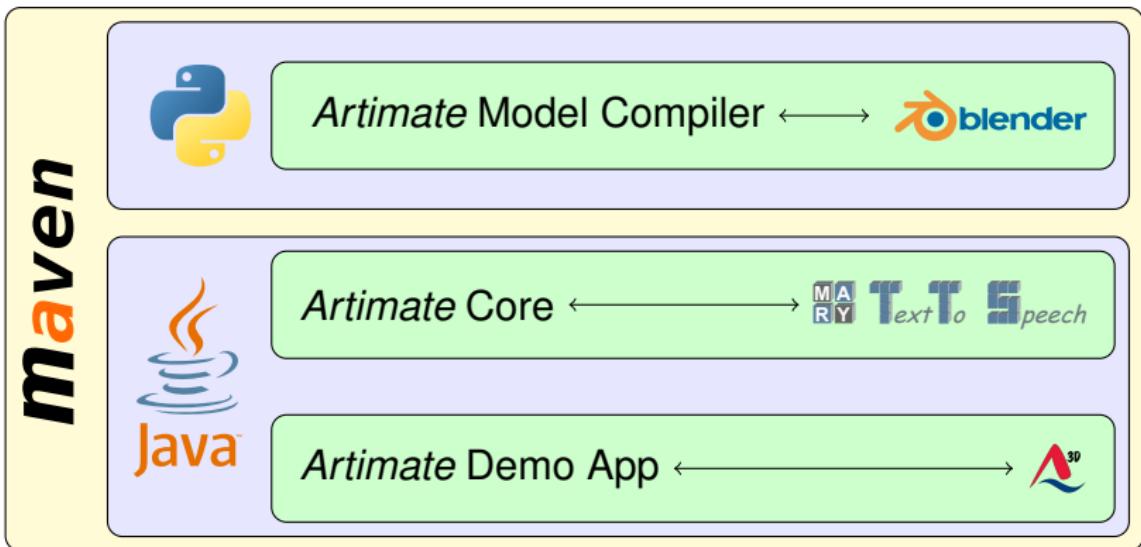
*Artimate Model Compiler* ←→



*Artimate Core* ←→ **MARY** **T**<sub>ext</sub> **T**<sub>o</sub> **S**<sub>peech</sub>

*Artimate Demo App* ←→ The A3D logo, which features a stylized red and blue 'A' character with a small '3D' in the top right corner.

# Architecture



# Summary

- Adapted skeletal animation for articulatory animation

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- Motion capture data (EMA)
- Modular, cross-platform implementation with open-source dependencies
- Self-contained, portable resource

# Further work

- Handle noisy EMA data

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- Public release