

## 2-D Animation at Klei Entertainment

**Jeff Agala and Aaron Bouthillier**  
Klei Entertainment





# About us

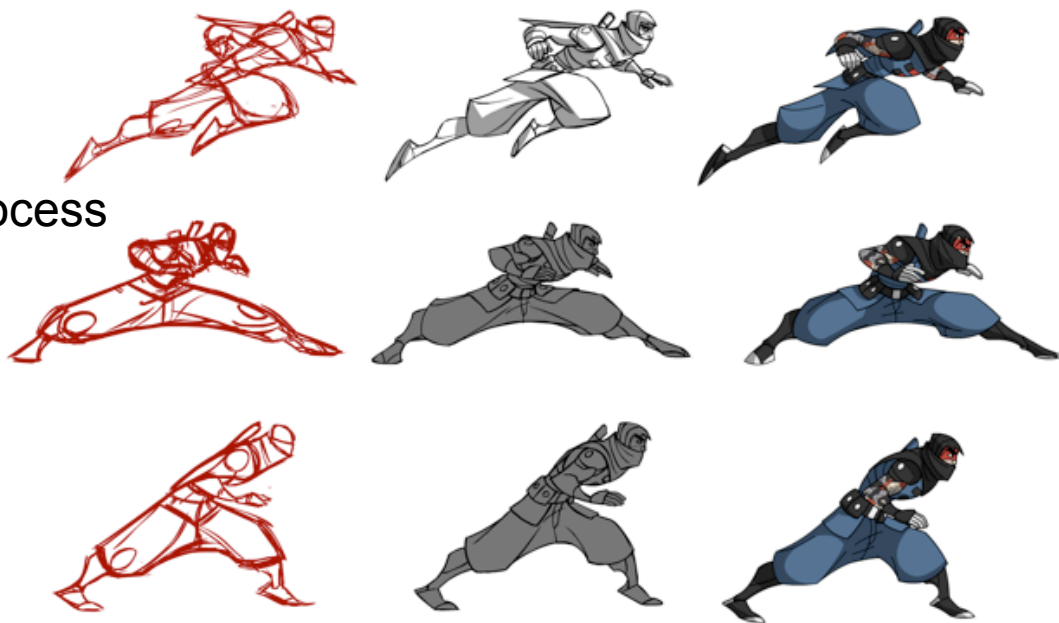


# Goals

High quality fluid 2d animation

60 fps on XBOX360/PS3 in HD

Iterative game development process



# Rough Animation



# Rough Animation

Animation in Flash

Learn the character model

Streamline the design

# Tighten up Poses for Builds



# Tightening Poses for Builds

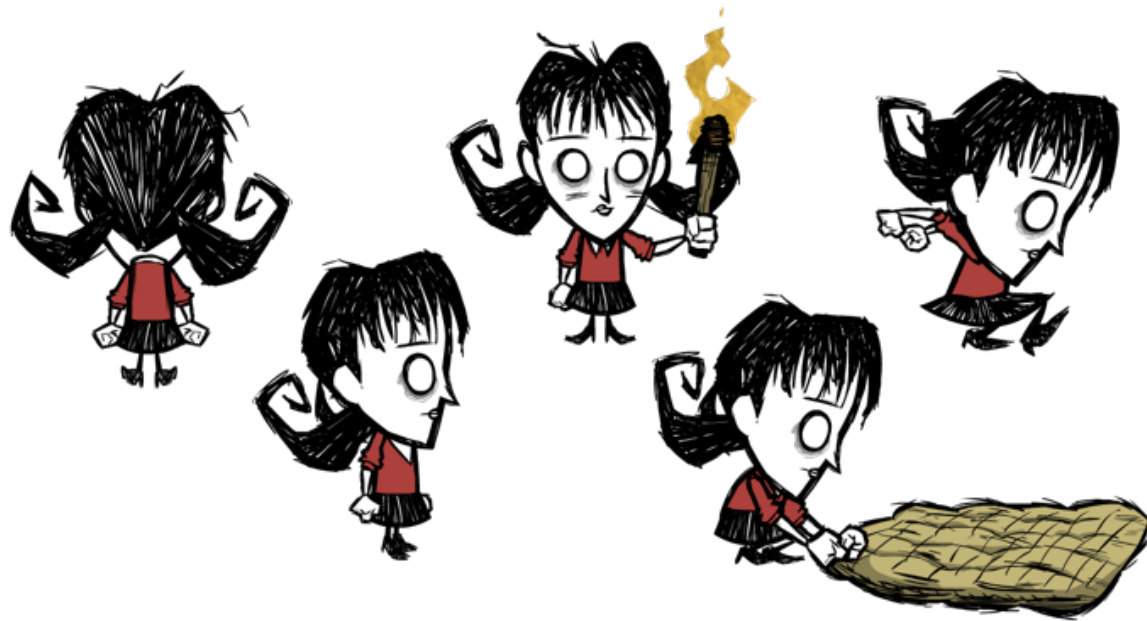
On Model

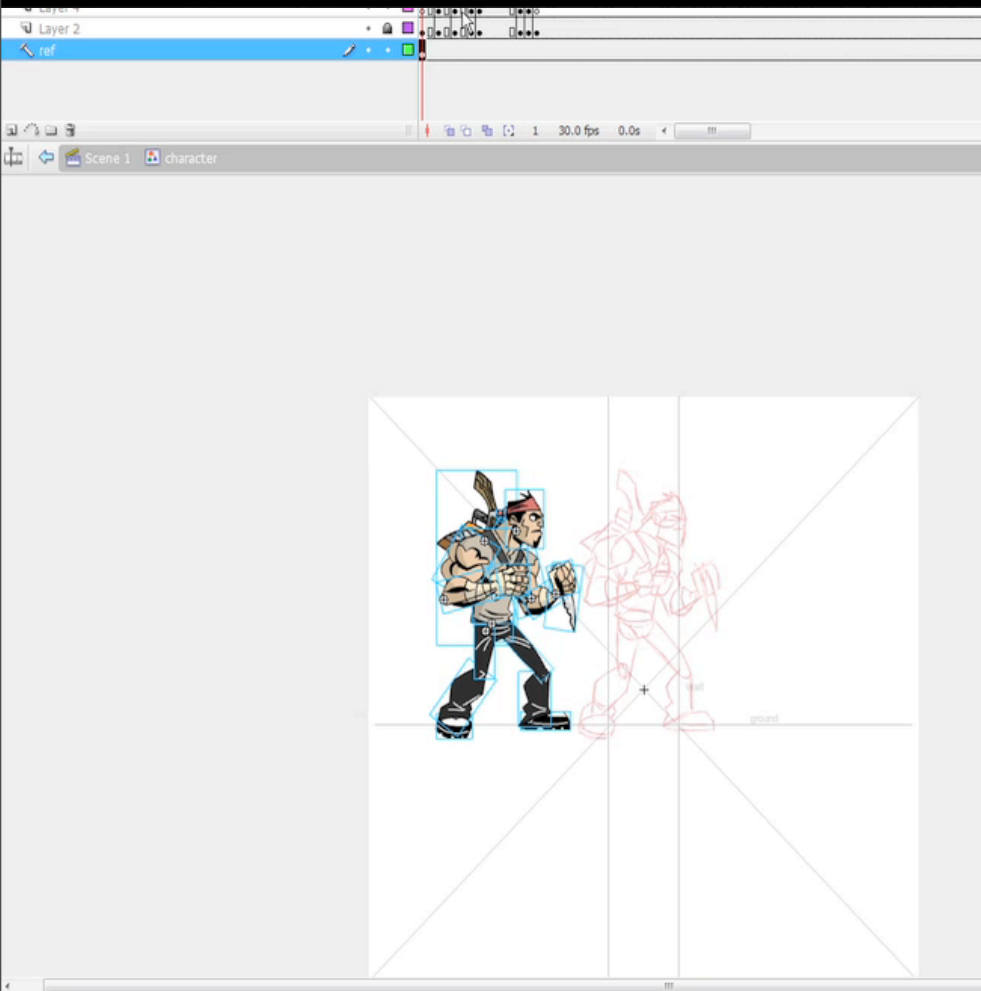
Storytelling Poses

Adjusting Design



# Character Builds





# Flash Builds

Using symbols in Flash

Each joint is a new symbol

Build is exported to a texture atlas

Time saver for clean up and inbetweening

# Large Build Library

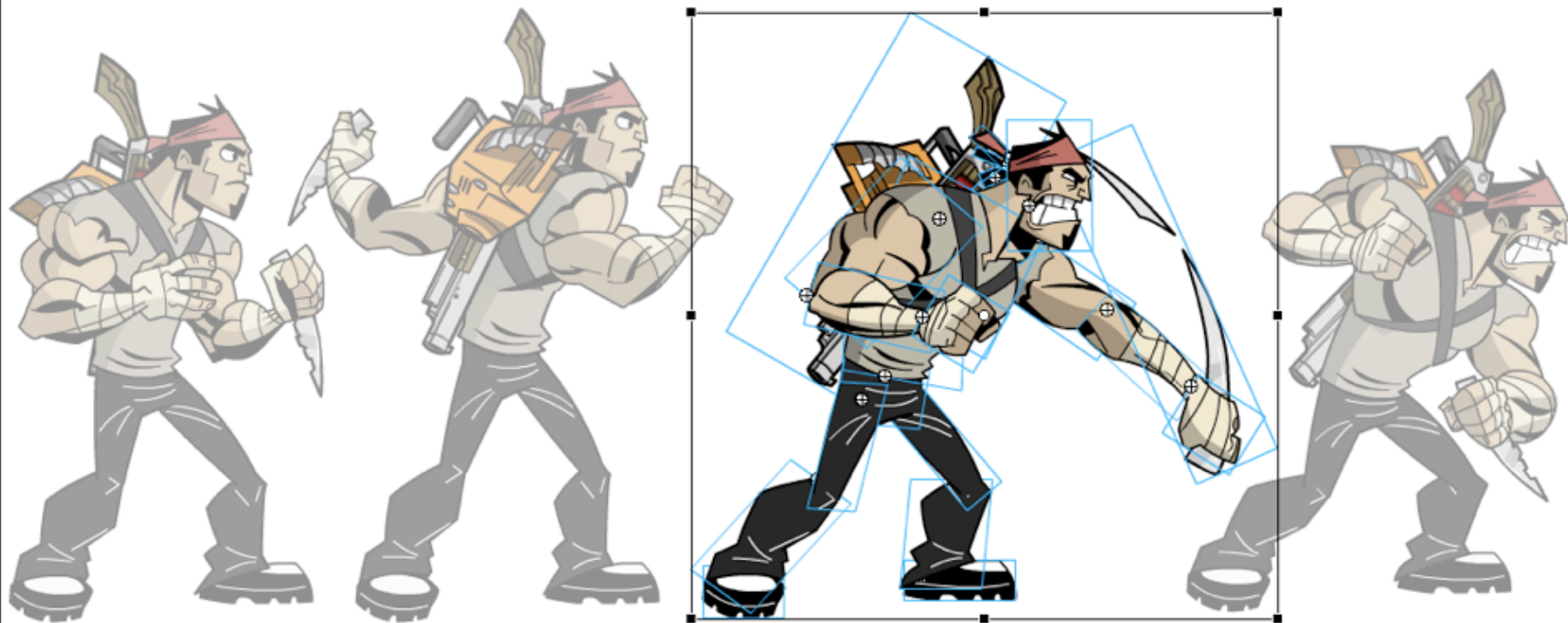


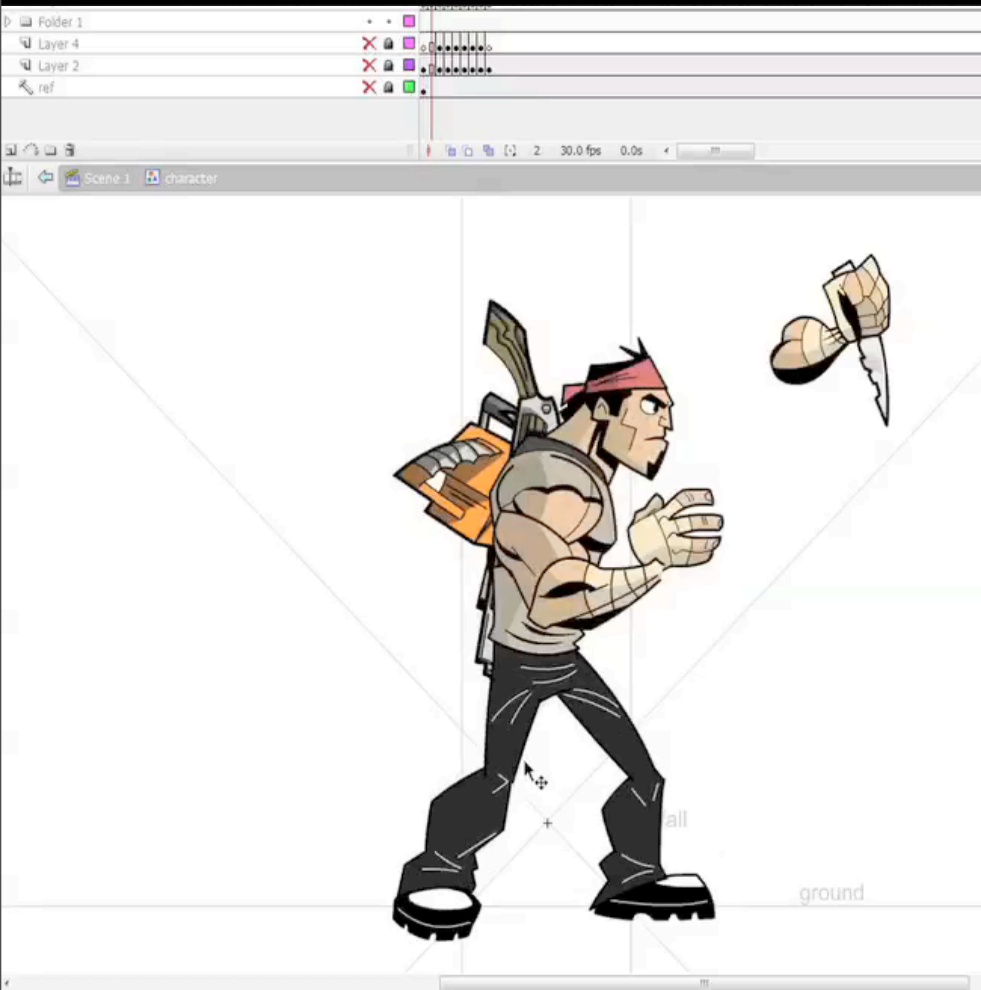
# Separated Character





# Symbol Animation





# Symbol Animation

Each symbol on it's own layer for tweening

Use labels on the timeline

Build new keys with existing pose assets

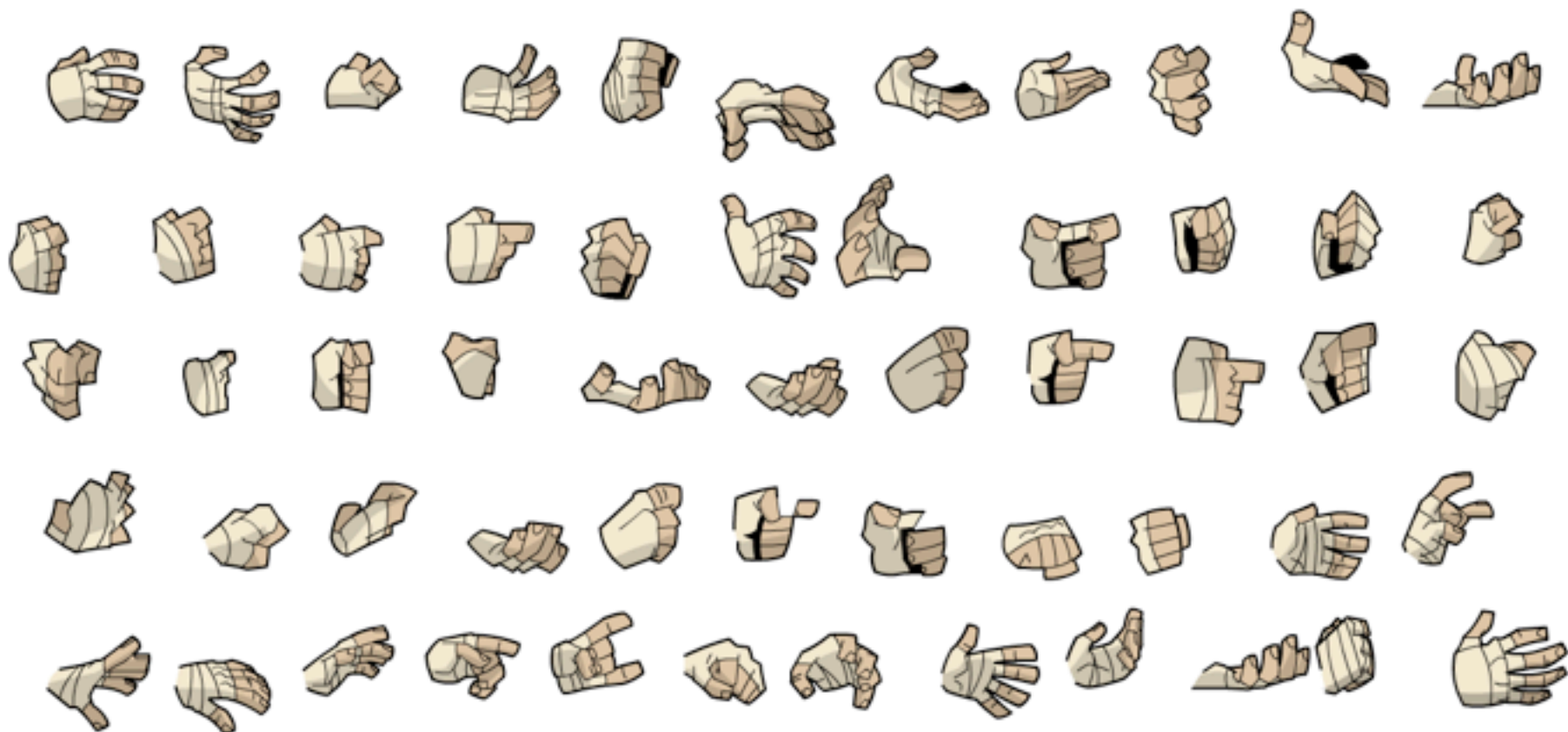


# Head Comp

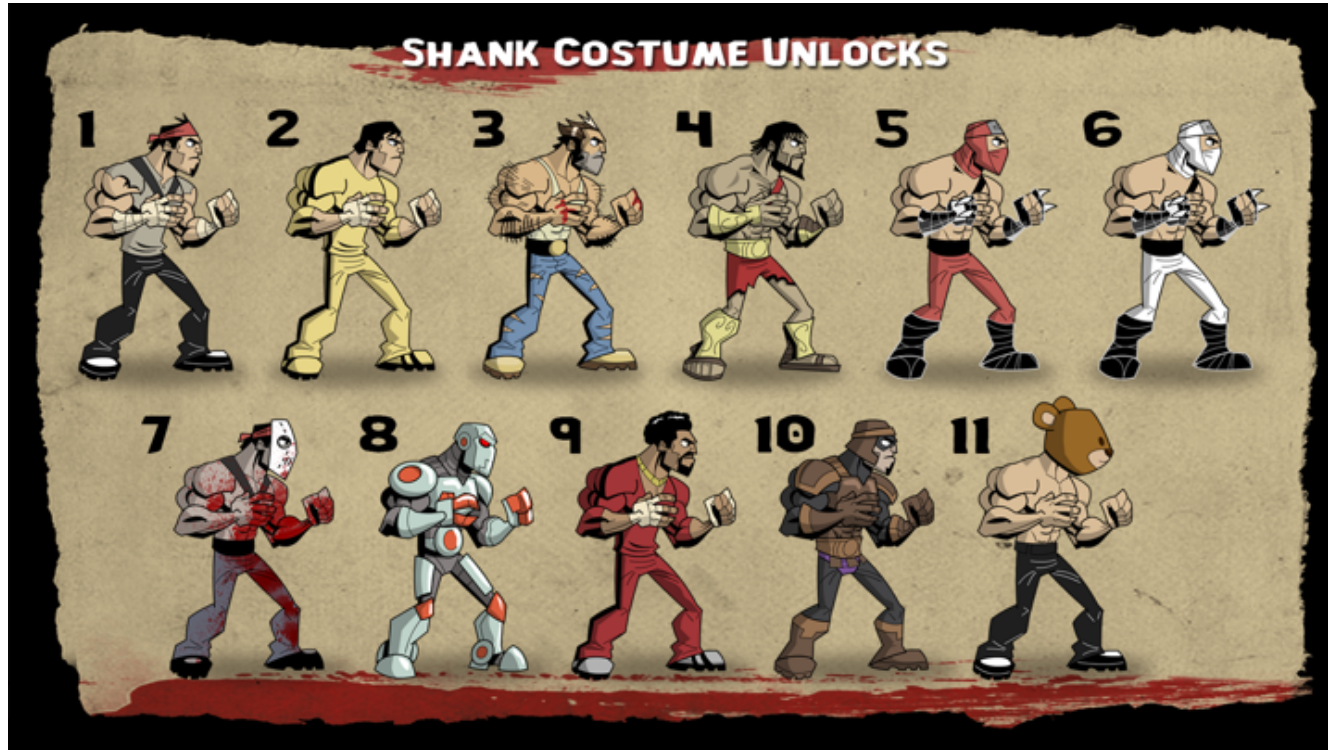


Name	Type
character	Graph
del_abs	Movie
del_at	Movie
del_aur	Movie
del_backpack	Movie
del_backpack_fame...	Movie
del_backpack_bunc...	Graph
del_backpack_mach...	Graph
del_backpack_minigun	Graph
del_backpack_saw	Graph
del_backpack_shotg...	Graph
del_backpack_sword	Graph
del_bowl	Movie
del_bowr	Movie
del_bwr	Movie
del_cst	Movie
del_eyer	Movie
del_eyewhite	Movie
del_fac	Movie
del_fti	Movie
del_ftr	Movie
del_hdi	Movie
del_hdr	Movie
del_hed	Movie
del_hrb	Movie
del_lr	Movie
del_lur	Movie
del_mth	Movie
del_nck	Movie
del_nos	Movie
del_plv	Movie
del_pup	Movie
del_shank	Graph
del_shw	Graph
punch	Graph





# Re-Use Animation





WILSON



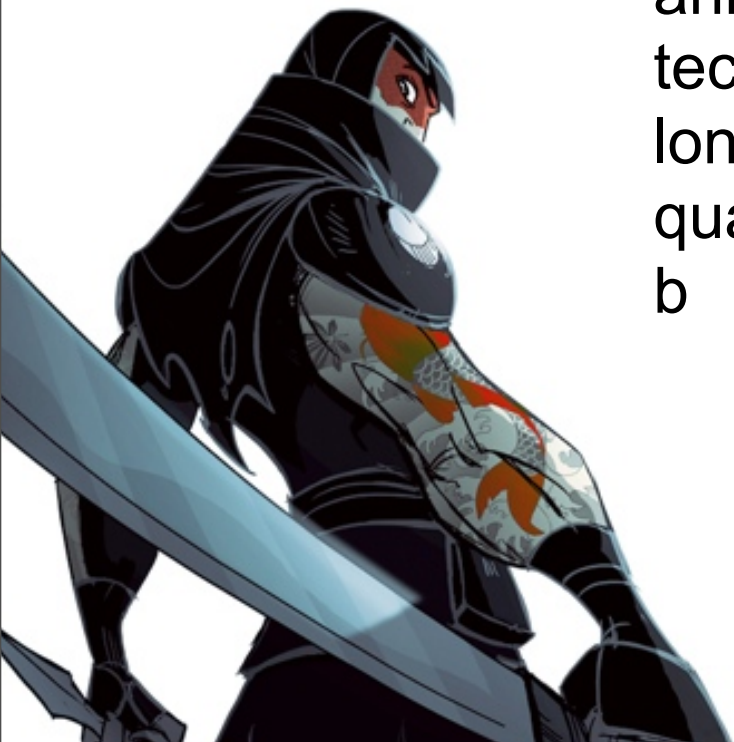
WES



WILLOW

# Benefits

animator freedom  
technical diversity  
longevity  
quality  
b





# Contact Info



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