

Raphael Matto

Senior Software Engineer and Look Development Artist

I've worked for over twenty years as a production engineer and look development artist in highly technical professional environments. I boast strong communication skills, am self-directed, and feel comfortable leading a team.

I am an expert in the development and application of procedural patterning tools for 3D geometry shaders in feature film and television. I also specialize in designing web and network-based pipeline solutions for small and massive multi-site animation studios.

Demo Reel:

<https://vimeo.com/raphaelmatto/demoreel>

Work Experience:

Skydance Animation, Los Angeles, CA

Technical Direction Supervisor, 2024-2025

- Promoted **Eddie and the Beanstalk**'s creative leadership needs, driven by John Lasseter's vision.
- Led team of engineers (Show TDs) to replace Windows-based site-specific artist tools with Linux cloud-based tools.
- Merged Spain-based Shotgun workflows and locally-hosted site with LA-based workflows and hosted Shotgun site.

Spire Animation Studios, Los Angeles, CA

Senior Pipeline Engineer, 2023

- Built artist tools in Unreal Engine with Blueprints and Python.
- Led effort to adopt Fractal Picture's Shotgun Toolkit Pipeline and merge the two studios' tech stacks.
- Worked with DevOps to create Kubernetes (k8s)-based micro-services framework behind Okta identity provider and wrote web apps on top of it for Shotgun and Deadline.
- Built framework for tracking tool adoption and errors, with OpenTelemetry, Signoz, and Sentry.

DreamView / InfiniteWorld, San Francisco, CA

Supervising Pipeline Engineer, 2020-2022

- Integrated Shotgun Toolkit with existing pipeline and asset management tools in nine DCCs via standard and custom code-translation engines.
- Diagnosed pipeline bottlenecks and presented new Shotgun-free architecture for desktop tool distribution platform.
- Built multi-platform QT-based media download and Davinci Resolve-based automation apps for the editorial department.

Walt Disney Imagineering, Glendale, CA

Senior Software Engineer, 2018-2020

- Built fully-documented framework to securely connect existing WDI services, using Docker Compose, Nginx, React/Material-UI, Vue/Vuetify, Shotgun/Toolkit, Django, Flask, AWS, and other technologies.
- Built flexible charting plugins for React-based pop-up dialog framework using amCharts and Shotgun.
- Standardized and documented engineering workflows to improve collaboration, based around Confluence, Jira, and GitLab.

Autodesk, San Francisco, CA

Shotgun Pipeline Engineer, 2015-2018

- Consulted with and built tools for Shotgun clients: Industrial Light & Magic (ILM), Electronic Arts, Epic, Activision (Treyarch, Infinity Ward), Microsoft, Jaunt VR, Lytro, Netflix, Warner Bros., Marvel, and many others.
- Developed software products for Shotgun and Shotgun Toolkit related to VR, editorial workflows, and user-defined automation.
- Created thirteen videos—five hours of content—for the Shotgun Developer Training YouTube series.

Floored, Manhattan, NY

Software Developer, 2014

- Wrote cross-platform ftp desktop application using PySide and AWS's S3 boto api.
- Developed and debugged mobile app with the Android SDK, Java, and IntelliJ.
- Wrote framework for processing pointclouds with Julia from Rhino Python.
- Troubleshooting custom hardware for laser scanning interior spaces.

High 5 Games, Manhattan, NY

Senior Pipeline Engineer, 2014

- Designed art department workflows, built renderfarm around Deadline 6.2.
- Developed Python & ExtendScript tools for Cinema4d, Maya, and Adobe, and integrated them with Shotgun, Perforce, and Jira.
- Wrote documentation, worked with third party developers.

PandaPanther, Manhattan, NY

CG Supervisor, 2012 - 2014

- Built entire pipeline for the back end of CG production; this included tools to manage and review assets and shots in the modeling, look-dev, lighting, compositing, and editorial departments.
- Led lighting team to complete 60 minutes of CG footage for the Skylanders video game franchise.
- Radiance map capture and HDR IBL lighting to match miniatures environments.
- Wrote documentation system and installed and configured Redmine to track artists' tasks and bugs.
- Shader development, look-dev, shot lighting, documentation.

New York University/SCPS, School of Visual Arts (SVA), Filmakademie, Siggraph

Instructor, 2006 - Present

- I teach a class called "Production Studio," which focuses on advanced shading, texturing, and look development techniques in the context of Maya and the rendering applications V-Ray, Arnold, and Renderman.

Blue Sky Studios, Greenwich, NY

Lead Materials Technical Director, 2010 - 2012

- Sets lead for Ice Age: Continental Drift.
- Lead team meetings and collaborative group efforts to respond to changes in production.
- Wrote a LAMP-based documentation content management system (CMS), and wrote technical documentation for many production-related tools and techniques.

Materials Technical Director, 2004 - 2006

- Developed core pipeline tools with a variety of technologies.
- Wrote material scripts (shaders) to look-dev character assets and environments.

Composite/Render Wrangler, 2003

- Wrote command-line scripts to manage renderfarm.
- Wrote LAMP-based web utilities to analyze renderfarm data and generate statistics.
- Cleanup compositing for final renders.

Weta Digital, Wellington, New Zealand

Shader Writer, 2007 - 2009

- Wrote Renderman shaders and developed MEL-based shader UIs for look-dev artists.
- Painted textures and adjusted shaders to look-dev character assets and environments.
- Wrote LAMP-based asset tracking tools.
- Tracked and fixed bugs in production tools.

Lead Lighter, 2006 - 2007

- Led lighting of sequences.
- Introduced procedural patterning techniques to the Shaders Department.

Feature Film & Game Credits:

Film/game title	Credit
<i>Skylanders</i>	CG Supervisor
<i>Lostopolis</i>	CG Supervisor
<i>Ice Age: Continental Drift</i>	Lead Materials Technical Director
<i>Rio</i>	Senior Materials Technical Director
<i>Avatar</i>	Shader Writer
<i>District 9</i>	Shader Writer
<i>30 Days of Night</i>	Lighter
<i>The Water Horse, Legend of the Deep</i>	Lead Lighter
<i>Fantastic Four: Rise of the Silver Surfer</i>	Lighter
<i>Horton Hears a Who</i>	Materials Technical Director
<i>Ice Age: The Meltdown</i>	Materials Technical Director
<i>Robots</i>	Materials Technical Director

Relevant Technical Skills:

I learn programming languages, APIs, and software applications quickly. Here is a sample of specific technologies I've worked with:

Operating sytems	Years	Software applications	Years	Programming languages	Years
Unix / Linux	20+	Maya/Mental Ray	20+	SI (Renderman) /	6
Macintosh / OSX	20+	VRay/Arnold/Renderman	10+	Studio++ (Blue Sky's renderer)	6
Windows / PC	20+	Cinema4d	2	Python / PyQt / PySide / Flask / Django	15+
Android	10+	Nuke/Shake/Hiero	10+	Php / MySQL / Codeignitor	15+
IOS	10+	Adobe Creative Suite	20+	MEL (Maya's Embedded Language)	20+
		Mari/Mudbox	7	C/C++ like languages	8
		Perforce/Git/SVN/CVS	15+	Perl	20+
		Shotgun/FTrack	5+	Javascript / ExtendScript / React / Vue	10+
		Deadline/Smedge/Rush	15+	Tcl	2
		Composite/Toxik	2	Ruby / Ruby on Rails	1
		Final Cut Pro/Davinci R.	20+	HTML / CSS	20+

Awards:

- Academy Award for Best Visual Effects, Avatar 2009 (my team at Weta won an Oscar!)
- Visual Effects Society (VES) award nomination for "Best Digitally Created Environment," for The Water Horse

Education:

Date	Institution
2012-2014	<i>Vermont College of Fine Arts</i> , MFA creative writing program, poetry
2008	<i>Victoria University</i> , creative writing workshops at The International Institute for Modern Letters
2002	<i>Arizona State University</i> , MFA creative writing program, fiction
1997-2001	<i>Skidmore College</i> , creative writing, BA / Studio Art minor