Or Fleisher

Engineer | Creative Technologist

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Principal engineer solving complex visual problems, specializing in computer graphics, computer vision, and data visualization.

WORK

Nike
New York, NY

Principal Front-End Engineer 2023-2026

- Led the engineering team behind Nike's .SWOOSH 3D commerce experiences.
- Built a cloud renderer that generated more than 50,000 product thumbnails and videos from 3D models.
- Mentored engineers working across open source, design systems, and developer tooling.

New York University | ITP
New York, NY

Adjunct Professor, Visual Journalism Fall 2023

- Co-taught technical 3D web programming, guiding graduate students from visual-journalism concepts to interactive browser-based work.

The New York Times | Research & Development
New York, NY

Staff Engineer 2021-2023

- Built a real-time 3D editor that enabled visual editors to publish live 3D sports coverage for the first time, including the Winter Olympics, Super Bowl, and World Cup.
- Created CI/CD templates and technical documentation that standardized delivery workflows across the R&D engineering team.
- Open-sourced The Times's 3D toolchain for asset optimization, headless Blender rendering, and camera control. The projects earned hundreds of GitHub stars and hundreds of thousands of downloads.
- Presented on behalf of the R&D team at Adobe Research, Columbia University, and Georgia Tech; mentored engineers across the team.

Senior Engineer 2019-2021

- Built 3D rendering, reconstruction, and data pipelines for COVID-19 and Olympics stories that were among The Times's most-read work when published.
- Built athlete-tracking pipelines used in more than 10 published Olympics graphics.
- Invented a patented system for generating three-dimensional map tiles and set organization-wide open-source standards.

Vimeo
New York, NY

Senior Engineer, Emerging Technology 2019

- Led development of VR playback for Vimeo's web player.
- Developed patented computer-vision and machine-learning methods for video-format classification and metadata injection.

Principal Creative Technologist 2018-2019

- Built and maintained open-source video integrations for Unity, three.js, A-Frame, depth capture, and volumetric playback.
- Created Vimeo's Looking Glass holographic-video experience, featured by TechCrunch, Forbes, Wired, and Engadget.

Phenomena Labs
Tel Aviv, Israel

Co-Founder | Creative & Technical Director 2010-2016

- Co-founded an award-winning visual-effects and interaction-design studio, developing and directing five VR titles released across Oculus, Gear VR, and WebVR.
- Presented work at Cannes, GDC, SIGGRAPH, and SXSW; earned honors from FWA, Awwwards, WorldFest, and Urban MediaMakers.

EDUCATION

New York University | Tisch School of the Arts
2016-2018

M.P.S., Interactive Telecommunications Program (ITP)

Focus: computer graphics, volumetric capture, machine learning, and immersive experience development. Research with Ken Perlin's Future Reality Lab.

Tel Aviv University
2011-2014

B.A., Film and Television

Research: sound design and interaction in branching narrative experiences.

PUBLICATIONS & PATENTS

PATENT
Tile Three-Dimensional Mapping Tool
U.S. Patent 12,223,596 | Inventor

PATENT
Video Format Classification and Metadata Injection Using Machine Learning
U.S. Patent Application 2020/0372255 | Inventor

AIAA SCITECH 2022
Simulation of Flow and Pathogen Transport in a Narrow-Body Airplane Cabin
Co-author

ACM SIGGRAPH 2018
Volume: 3D Reconstruction of History for Immersive Platforms
Co-author

SELECTED AWARDS

Gerald Loeb Award
COVID-19 aviation and Empire State Building visual reporting

Malofiej Awards
Gold, two Silver, and Bronze medals for visual journalism

Society for News Design
Gold, two Silver medals, and multiple Awards of Excellence

Society for Advancing Business Editing and Writing
Best in Business, Innovation winner (2020 and 2021)

WorldFest | NASA Remi Award
Livyatanim: MYTH

SELECTED OPEN SOURCE

headless-three-webgpu
A headless WebGPU renderer for servers and agent harnesses.

The New York Times Containerized 3D Rendering
Docker containers for running Blender headlessly in local and distributed rendering workflows.

Vimeo Unity SDK
Led development of Vimeo's open-source Unity SDK for streaming, recording, and publishing video in Unity applications.

The New York Times 3D Bundler Plugins
Build plugins for optimizing glTF assets before publication.

SKILLS

Computer graphics
WebGL, WebGPU, GLSL, HLSL, OpenGL, Three.js, React Three Fiber, Blender, Unity

Web engineering
TypeScript, JavaScript, React, Node.js, Express, REST APIs, GraphQL, WebSockets, relational databases, server architecture, Docker, CI/CD

Computer vision & ML
PyTorch, OpenCV, TensorFlow, Core ML, 3D reconstruction, depth sensing, volumetric capture

Additional languages
C++, C#, Python, Swift, English, Hebrew