

# Experience & Education

## EXPERIENCE

### Principal Engineer, AI for Science

New England based    2025-Present

Leading Engineering efforts for AI for Science. Accelerating scientific discovery through artificial intelligence.

- Focus: Biology, Physics, and Materials Science
- Scaling AI systems for scientific breakthrough
- Bridge between research and engineering

Google  
DeepMind

### AIX: AI Experience Lead

London, UK    2022-2025

Led the AIX team focused on prototyping and human-AI experiences. Creating prototypes for major AI demonstrations.

- Prototypes: Project Astra, Music AI Sandbox
- Tools: Vibe Coding in AI Studio Build
- Gemini Launch: Demonstrations and interactive experiences

Google DeepMind

### Head of Visualization

London, UK    2017-2022

Built and led the Visualization team. Created critical tooling for research, safety, and interpretability.

- Science: AlphaFold 2 & 3 Visualization
- Interpretability: In-context learning, sparse autoencoders
- Papers: Gopher, Chinchilla, Flamingo, Gemini 1.0 reports

DeepMind

### Machine Intelligence Tooling

Google

## EDUCATION

### Massachusetts Institute of Technology

PhD in Media Arts and Sciences  
(Drop out)

Master of Science (2008-2010)

### Carnegie Mellon University

BS in Computer Science (2003-2007)

BFA in Fine Art (2003-2007)

## SKILLS

Python (JAX, PyTorch, NumPy)

TypeScript, JavaScript, Node.js

Go, C++, ML Infrastructure

AI Systems & Tooling Architecture

Data Visualization & Interpretability

Human-AI Interaction (AIX)

React, Lit, Angular

Three.js, WebGL, Graphics

Product & Technical Leadership

Prototyping and tooling for machine intelligence  
(TensorFlow, On-device ML).

- TensorFlow Graph Visualizer (Best Paper at VAST)
- TensorBoard early development and design
- Colab Webcomponents integration
- Facetracking annotation tools for dataset creation
- DeepDream VR experiment

**AWARDS**

- Emmy - Data Arts Team
- FWA - Site of the Month/Day
- IEEE VAST Best Paper
- US Patents
- University & College Honors

**Creative Engineer****Google Creative Lab**

San Francisco, CA 2011-2015

Google Data Arts Team. Developed experimental content, libraries, and websites to drive the web forward.

- Chrome Experiments API design
- Unnumbered Sparks (TED sculpture)
- Just A Reflektor (Emmy award-winning interactive video)
- This Exquisite Forest (Tate Modern)
- WebGL Globe & Bookcase

**Research Assistant****MIT Media Lab**

Cambridge, MA 2008-2011

Fluid Interfaces Group under Pattie Maes. Focused on personal data, visualization, AI, and interfaces.

- NIPS Co-authored paper on topic modeling
- Created new technique for gaze tracking
- Developed NLP visualization techniques