

# FABIAN OFFERT

Assistant Professor, History and Theory of the Digital Humanities  
University of California, Santa Barbara

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zentralwerkstatt.org

My work is situated at the intersection of critical artificial intelligence studies, the digital humanities, media studies, and the history of technology. I study how machine learning models represent culture and what is at stake – aesthetically and politically – when they do. My current book project focuses on "Machine Visual Culture" in the age of foundation models.

## APPOINTMENTS

- 2020- **Tenure Track Assistant Professor, History and Theory of the Digital Humanities**  
University of California, Santa Barbara  
Affiliations: Department of Germanic and Slavic Studies, Media Arts and Technology Program, Comparative Literature Program, Center for Responsible Machine Learning, Mellichamp Initiative in Mind & Machine Intelligence
- 2021 **Assistant Professor, Digital Visual Studies** (declined)  
University of Zurich
- 2019-20 **Postdoctoral Researcher**  
Friedrich Alexander University Erlangen-Nürnberg  
DFG Priority Program "The Digital Image"
- 2014-20 **Graduate Student Researcher**  
University of California, Santa Barbara (Experimental Visualization Lab)  
Hochschule für Gestaltung, Karlsruhe (Critical Artificial Intelligence Research Group)  
University of Chicago (STAGE Lab)
- 2012-14 **Assistant Curator**  
ZKM Center for Art and Media, Karlsruhe
- 2010 **Assistant Project Manager**  
Goethe-Institut New York

## EDUCATION

- 2014-20 **PhD, Media Arts and Technology**  
University of California, Santa Barbara  
Thesis: Critical Machine Vision. Epistemology and Aesthetics of Deep CNNs  
Committee: Profs. George Legrady, Alan Liu, Marko Peljhan
- 2006-12 **Diploma, Applied Theater Studies**  
Justus-Liebig University Gießen  
University of California, Berkeley  
Thesis: Information, Konzept, Berechenbarkeit. Zum Computer als Medium der Kunst  
Committee: Profs. Gerald Siegmund, Heiner Goebbels

## SELECTED GRANTS

Total funding to date: ~\$2 Million

- 2021- **PI, Critical Machine Learning Studies, \$17,500**  
UCHRI, UC Santa Barbara Academic Senate, UC Santa Barbara CITS
- 2022- **PI, AI Forensics, €1.4 Million (UCSB: ~\$270,000)**  
Volkswagen Foundation

- 2021 **PI, AI for DH, €7,000**  
Bavaria-California Technology Center
- 2018 **PI, Anthroposcene, €80,000**  
French Ministry of Culture, Kunststiftung NRW, and others
- 2014 **First co-author, Vilém Flusser und die Künste (ZKM), €142,000**  
Kulturstiftung des Bundes
- 2013 **PI, P-Server, €15,000**  
IRCAM/Centre Pompidou
- 2013 **First co-author, Sasha Waltz. Installationen, Objekte, Performances (ZKM), €325,000**  
Kulturstiftung des Bundes, Baden-Württemberg-Stiftung

### SELECTED FELLOWSHIPS

- 2022 **Research Residency**  
Cambridge Center for Digital Humanities
- 2014-18 **Fellow of the Regents of the University of California**  
University of California, Santa Barbara
- 2011 **Santander European Universities Group Fellow**  
University of California, Berkeley
- 2010 **German Academic Exchange Service Fellow**  
Goethe-Institut New York
- 2006-12 **German National Academic Foundation Fellow**  
Justus Liebig University, Gießen

### SELECTED TECHNICAL WORK

- 2020- [imgs.ai](#)  
Visual search engine for digital art history based on multimodal neural network embeddings. Collaboration with Peter Bell, Deutsches Dokumentationszentrum für Kunstgeschichte – Bildarchiv Foto Marburg [Python, JavaScript, Computer Vision, Machine Learning, Web Server]
- 2018 **Anthroposcene**  
Stage design for experimental music theater project employing a custom pix2pix model on live video. Collaboration with Laurent Durupt, Museum Kunstpalast, Düsseldorf, ECLAT Festival, Stuttgart, Festival Scène d'Europe, Reims, and others [Python, GLSL (Shaders), Computer Vision, Machine Learning]
- 2013 **P-Server**  
Live computer graphics and embedded electronics for experimental music theater project. Collaboration with Laurent Durupt, IRCAM/Centre Pompidou, Paris, and others [Max/MSP, Arduino, Processing]

### PUBLICATIONS

[Google Scholar Profile](#)

Monographs

- 2025 **Offert, F. and Impett, L. *Machine Visual Culture*. Meson Press/University of Minnesota Press (forthcoming) [OA]**
- 2020 **Offert, F. *Critical Machine Vision. Epistemology and Aesthetics of Deep CNNs*. Dissertation. University of California, Santa Barbara**

## Peer Reviewed

- 2024 Offert, F. & Bell, P. "imgs.ai. A Multimodal Search Engine for Digital Art History." *International Journal for Digital Art History* (forthcoming) [OA]  
Offert, F. & Phan, T. "A Sign That Spells: Machinic Concepts and the Racial Politics of Generative AI." *Journal of Digital Social Research* (forthcoming) [preprint]  
Offert, F., Kim, P. & Cai, Q. "Synthesizing Proteins on the Graphics Card. Protein Folding and the Limits of Critical AI Studies." *AI & Society* (forthcoming) [preprint]  
Offert, F. & Impett, L. "There Is a Digital Art History." *Visual Resources* 38(2) [OA]  
Ries, T., van Dalen-Oskam, K., & Offert, F., "Reproducibility and Explainability in Digital Humanities." *International Journal for Digital Humanities* 6 [OA]
- 2023 Offert, F. "On the Concept of History in Foundation Models." *IMAGE: Zeitschrift für interdisziplinäre Bildwissenschaft* 37 [OA]  
Offert, F. "Can We Read Neural Networks? Epistemic Implications of two Historical Computer Science Papers". *American Literature* 95(2)
- 2021 Offert, F. "Latent Deep Space. GANs in the Sciences." *Media + Environment* 3(2) [OA]  
Offert, F. & Bell, P. "Reflections on Connoisseurship and Computer Vision." *Journal of Art Historiography* 24 [OA]  
Offert, F., & Bell, P. "Perceptual Bias and Technical Metapictures: Critical Machine Vision as a Humanities Challenge." *AI & Society* 36 [OA]
- 2020 Offert, F., & Bell, P. "Generative Digital Humanities." *Proceedings of the CHR 2020: Workshop on Computational Humanities Research*  
Offert, F., & Bell, P. "Understanding Perceptual Bias in Machine Vision Systems." In: R. Reussner R., Koziolok A. & Heinrich, R. (eds.). *INFORMATIK 2020 Lecture Notes in Informatics (LNI)*. Gesellschaft für Informatik [OA]
- 2018 Offert, F. "Images of Image Machines. Visual Interpretability in Digital Art History." *Proceedings of the European Conference on Computer Vision: VISART Workshop* [OA]
- 2017 Offert, F. "'I know it when I see it'. Visualization and Intuitive Interpretability. *Proceedings of the NeurIPS Symposium on Interpretable Machine Learning* [OA]
- 2015 Offert, F. "Conceptual Superposition. The Aesthetics of Quantum Simulation." *SIGGRAPH Asia 2015 Art Papers*

## Book Chapters

- 2025 Offert, F. "Are Nearest Neighbors Good Neighbors?" In: Somaini, A. (ed.). *The World through IA. Jeu de Paume* (forthcoming)  
Offert, F. "Postdigital Artificial Intelligence." In: Gerlach, N. & Vagts, S. (ed.). *Postdigital Painting*. Reimer (forthcoming)
- 2024 Offert, F. "Five Theses on the End of AI Art." In: Scherffig, L. (ed.). *(Un-)learn AI – Approaching AI in Aesthetic Practices* (forthcoming) [preprint]  
Offert, F. "On the Concept of History in Foundation Models." In: Bajohr, H. (ed.). *Thinking With AI*. Open Humanities Press (forthcoming) [preprint]  
Offert, F. & Bell, P. "Manufacturing Visual Continuity. Generative Methods in the Digital Humanities." In: Johnson, J.M., Mimno, D. & Tilton, L. (eds). *Debates in the Digital Humanities: Computational Humanities*. University of Minnesota Press  
Offert, F. "Maschineninterpretation mit Interpretationsmaschinen. Explainable Artificial Intelligence als bildgebendes Verfahren und bildwissenschaftliches Problem." *Bildwelten des Wissens* 19 [OA]

- Offert, F. "[KI-basierte Verfahren in der bildenden Kunst.](#)" In: Catani S. & Pfeiffer J. (eds). *De Gruyter Handbuch KI und die Künste*
- 2023 Offert, F. "[The Meaning Trap.](#)" In: Tuschling, A., Sudmann, A. & Dotzler, B.J. (eds). *ChatGPT und andere "Quatschmaschinen". Gespräche mit Künstlicher Intelligenz.* transcript [OA]
- Offert, F. "[KI-Kunst als Skulptur.](#)" In: Groß R. & Jordan R. (eds). *KI-Realitäten. Modelle, Praktiken und Topologien des Maschinellen Lernens.* transcript [OA]
- 2019 Offert, F. "Hands on Circuits. Preserving the Semantic Surplus of Circuit-Level Functionality with Programmable Logic Devices." In: Ellis, J. & Hall, N. (eds). *Hands On Media History. A New Methodology in the Humanities and Social Sciences.* Routledge [OA]
- Offert, F. "Exhibiting AI Art." In: Offert, F. & Hirsch, M. (eds.) *M.A.D.E.* University of California, Santa Barbara
- 2015 Offert, F. "The Poetic Algorithm or What Happened to Software Art?" In Offert F. & Escalante, J.M. (eds). *Open Sources.* University of California, Santa Barbara [OA]
- Offert, F. "Beyond the Scenes. Sasha Waltz's Objects and Installations Between Theater and the Visual Arts." In: Weibel, P., Waltz, Y. & Riedel, C. (eds). *Sasha Waltz. Installations, Objects, Performances.* Hatje-Cantz
- 2014 Offert, F. "Jonas Mekas on Video." In: Offert, F. (ed.) *Jonas Mekas: 365 Day Project.* Karlsruhe: ZKM Center for Art and Media [OA]

#### Public Humanities

- 2024 Offert, F. & Raley, R. "[Critical Machine Learning Studies: An Interview with Fabian Offert and Rita Raley.](#)" Interview for *UCHRI Foundry*
- 2023 Tasoff, H. "[The Mind of the Machine.](#)" Interview for *UCSB Current*
- Klusik-Eckert, J. "[AI Art und die Kunstgeschichte.](#)" Interview for *#arthistoCast*
- Breitling, D. "[Latent Deep Space.](#)" Interview for *Diffractions Collective*
- Tasoff, H. "[Peering Inside the Black Box.](#)" Interview for *UCSB Current*
- 2022 Offert, F. "[Ten Years of Image Synthesis.](#)" *zentralwerkstatt.org* – featured on *Hacker News* front page
- Offert, F. "[On the Emergence of General Computation from Artificial Intelligence.](#)" *zentralwerkstatt.org*
- 2021 Offert, F. "[There Is No \(Real Life\) Use Case for Face Super Resolution.](#)" *zentralwerkstatt.org*
- 2019 Offert, F. "[The Past, Present, and Future of AI Art.](#)" *The Gradient*
- Offert, F. "[What Could an Artificial Intelligence Theater Be?](#)" *zentralwerkstatt.org.* – translated into Cantonese for *Artism*
- 2018 Offert, F., Roland, T. & Cornell, D. "[Word Embeddings for Restricted Access Corpora.](#)" *WE1S Research Blog*
- Offert, F. "[Embrace the Latent Space. Notes on the Curatorial Challenges of an Emerging Media Art Form.](#)" *zentralwerkstatt.org*
- 2017 Offert, F. "[Intuition and Epistemology of High-Dimensional Vector Space.](#)" *zentralwerkstatt.org*
- Offert, F. "[A Syllogism in Turing's 1950 Paper.](#)" *zentralwerkstatt.org*

#### Editorial Activity

- 2023 Ries, T., van Dalen-Oskam, K., & Offert, F. (eds.) *Reproducibility and Explainability in the Digital Humanities.* *International Journal of Digital Humanities* Special Issue [OA]

- 2021 Offert, F., Klammt, A., Dieckmann, L., Röwenstrunk, D. & Effinger, M. (eds.) *Construction Kit: Review Journal for Research Tools and Data Services* [OA]
- 2019 Offert, F. & Hirsch, M. (eds.) *M.A.D.E.* University of California, Santa Barbara [OA]
- 2015 Offert F. & Escalante, J.M. (eds.) *Open Sources.* University of California, Santa Barbara [OA]
- 2014 Offert, F. (ed.) *Jonas Mekas: 365 Day Project.* Karlsruhe: ZKM Center for Art and Media [OA]

## WORKSHOPS, PANELS, AND EVENTS

- 2024 Offert, F. & Ries, T. "Integrating Digital Humanities and German Studies – Methods, Theory, Practice." Seminar at GSA 2024, Atlanta
- 2023 Offert, F. "Computation and the Humanities." Speaker Series at the UCSB Graduate Center for Literary Research
- Offert, F. & Phan, T. "The Politics and Aesthetics of Synthetic Media." Panel Series at 4S 2023, Honolulu
- Offert, F. "Visual Artificial Intelligence." Workshop at HSLU Lucerne
- 2022 Offert, F. & Dhaliwal, R.S. "Towards New(er) Criticism: Artificial Intelligence and Literary Dispositions" and "GPGPU: Imaging as General Purpose Computing." Panel Series at SLSA 2022, Purdue University
- Offert, F. & Impett, L. "CLIP and Beyond: Multimodal & Explainable Machine Learning in the Digital Humanities." Panel at DH 2022, Tokyo
- Offert, F. "Visual Artificial Intelligence." Workshop at HSLU Lucerne
- Offert, F. "Visual Artificial Intelligence for the Digital Humanities." Workshop at the European Summer University in Digital Humanities, Leipzig
- 2021 Offert, F. "Adversarial Examples." Workshop at the Bundesministerium für Bildung und Forschung/Gesellschaft für Informatik KI-Camp, Berlin
- 2020 Offert, F. "Face Recognition." Workshop at HfG Karlsruhe
- Offert, F. "Images as Data. Visual Culture and Machine Learning." Workshop at Hebrew University of Jerusalem
- Offert, F. "Adversarial Hacking." Workshop at transmediale Berlin
- 2019 Offert, F. "Images of Image Machines. Theory and Practice of Interpretable Machine Learning for the Digital Humanities." Workshop at the European Summer University in Digital Humanities, Leipzig

## INVITED TALKS

- 2025 Artificial Intelligence, Artificial History (**keynote**), Bielefeld University (upcoming)
- 2024 Are some things (still) unrepresentable?, Dartmouth College (upcoming)
- Are some things (still) unrepresentable? (**keynote**), University of Southern Denmark (upcoming)
- Postdigital Artificial Intelligence, Kunsthalle Bielefeld
- "This Is Your Brain on ImageNet": Embedding and Visual Epistemology, HfG Offenbach
- Machine Visual Culture, Stockholm City Museum
- Machine Visual Culture, Institut national de l'histoire d'art, Paris
- "This Is Your Brain on ImageNet": Embedding and Visual Epistemology, Seven Pines Symposium XXVI, Stillwater, Minnesota
- 2023 [The Production of \(Embedding\) Space](#), CCCB Barcelona

- Computational Iconographies, Schloss Dagstuhl – Leibniz-Zentrum für Informatik  
[The End of AI Art \(keynote\)](#), Goethe-Institut Nigeria, Lagos
- 2022 What Are Large Visual Models Models Of? (**keynote**), University of Zurich  
[On the Concept of History \(in Foundation Models\)](#), Ludwig Forum Aachen  
[On the Concept of History \(in Foundation Models\)](#), UC Berkeley  
 The End of AI Art (**keynote**), Technical University Cologne  
 Close Reading Distant Viewing, Cologne University
- 2021 On Machine Learning and Concreteness, Humboldt University Berlin  
 Art and Performance in the Age of AI, Goethe-Institut Budapest  
 Exploring Cultural Heritage with Computer Vision, German National Library, Leipzig  
[Latent Deep Space: GANs between Art and Science \(keynote\)](#), UNSW Sydney  
 Maschinensehen, Peter Behrens School of the Arts, Düsseldorf  
 Close Reading Distant Viewing, HSLU Lucerne  
 Close Reading Distant Viewing, UC Berkeley  
 Standardizing (CNN) Feature Vectors?, University of Geneva  
[Le corps halluciné \(keynote\)](#), Gaîté Lyrique, Paris  
 The Epistemology of Machine Learning in Digital Art History, EHESS Paris
- 2020 Visual Culture and Artificial Intelligence, Trier University  
 Critical Machine Vision as a (Digital) Humanities Challenge, UT Austin  
 The Best Sense Organs That Money Can Buy. Deep Neural Networks as Image-Making  
 Machines, Hebrew University of Jerusalem  
[Hallucinating Science with Neural Networks](#), transmediale Berlin
- 2019 Invention as Discovery. Synthetic Images in Science and Art, HfG Karlsruhe  
 Learning Physics with Computers, UC Santa Barbara
- 2018 Notes on the Aesthetics and Epistemology of Interpretable Machine Learning, UC Santa  
 Barbara
- 2017 Notes on the Aesthetics of Artificial Intelligence, EPFL Lausanne

## CONFERENCE TALKS

- 2024 The Latent Space of the Digital Humanities: Embedded Knowledge and Disciplinary  
 Convergence in the Age of Generative Artificial Intelligence, DH 2024, Washington D.C.  
 (accepted but not given)
- 2023 The Production of (Embedding) Space, SLSA 2023, Phoenix  
 A Sign That Spells: DALL-E 2, Invisual Images and The Racial Politics of Feature Space,  
 4S 2023, Honolulu  
 On the Concept of History (in Foundation Models), GSA 2023, Montréal  
 imgs.ai. A Deep Visual Search Engine for Digital Art History, DH 2023, Graz  
 Art History and Artificial Intelligence: Opportunities and Challenges of Large-Scale Visual  
 Models in the Digital Humanities, DH 2023, Graz  
 On the Concept of History (in Foundation Models), Tübingen University
- 2022 'CLIP Studies': Analyzing Large-scale Deep Learning Models in the Digital Humanities, DH  
 2022, Tokyo
- 2021 KI-Kunst als Skulptur, TU Dresden  
 Latent Deep Space. GANs in the Sciences, 4S Toronto  
 Towards a Critical Technical Practice in Digital Art History, AAH Birmingham

- Kunstgeschichte und Computer Vision, Digitale Erfahrungen und Strategien in der Kunstgeschichte, Verband Deutscher Kunsthistoriker
- 'A Painting of a Murder in the Style of Monet'. Applications and Limitations of Large-Scale Contrastive Pre-Training in Digital Visual Studies, Oxford University
- imgs.ai. A Fast, Dataset-Agnostic, Deep Visual Search for Digital Art History, Arbeitskreis Digitale Kunstgeschichte Open Space
- Generative Digital Humanities, CHR 2020, Amsterdam
- Understanding Perceptual Bias in Machine Vision Systems, InfDH 2020, Karlsruhe
- Towards Open Computer Vision Methods. Visual Analytics of Machine Learning Models in the Digital Humanities, DH 2020, Ottawa (conference canceled)
- Critical Machine Vision. Eine Perspektive für die Digital Humanities, DHd 2020, Paderborn
- 2019 Distant Viewing Iconographies, Zagreb University
- 2018 Images of Image Machines. Visual Interpretability in Computer Vision for Art, ECCV 2018, Munich
- Preservation as Translation. The Case for Programmable Logic Devices as a Strategy for Circuit-level Authenticity, Deutsches Museum Munich
- 2017 Exhibiting Computing Machines. Ontology as a Speculative Principle for Exhibition Design, SPT 2017, Darmstadt
- 'I know it when I see it'. Visualization and Intuitive Interpretability, NIPS 2017, Long Beach
- 2016 [machine here]. Non-Representation as a Rhetorical and Mathematical Strategy in the Construction of Alan Turing's Imaginary Machine, Harvard University
- The Conservator's Task. The Case for Programmable Logic Devices as a New Tool for the Preservation of Digital Art, Royal Holloway University of London
- 2015 Conceptual Superposition. The Aesthetics of Quantum Simulation, SIGGRAPH Asia 2015, Kobe
- "Re-enactment as Pre-enactment. The State of Emergency and the Theatrical Contract in Artistic Practices of Reenactment," UC Santa Barbara

## INVITED RESPONSES

- 2024 Respondent at: Computer Vision & Art History Today, Barnes Foundation, Philadelphia
- 2022 Response to Todd Presner: "Digitizing, Remediating, Remixing, and Reinterpreting Holocaust Memory," UC Santa Barbara
- Response to Leonardo Impett: "Neural Vision Models as Models of Visual Culture," Cambridge University
- Response to Alexandre Gefen: "Generative AI," UC Santa Barbara

## REVIEW ACTIVITY

- 2024 *Monatshefte*  
*Configurations*  
DH 2024, Washington D.C.  
DHd 2024, Passau
- 2023 Deutsche Forschungsgemeinschaft (DFG)  
Swiss National Science Foundation (SNSF)  
National Endowment for the Humanities (NEH)  
Wittgenstein Award  
DH 2023, Graz

- DHd 2023, Trier
- 2022 *AI & Society*  
*Trace: A Journal of Writing, Media, and Ecology*  
*International Journal of Digital Humanities*  
*Programming Historian*  
 European Summer School in Digital Humanities 2022, Leipzig  
*New Media and Society*  
*Data in Brief*  
 DH 2022, Tokyo  
 DHd 2022, Potsdam
- 2021 *AN-ICON*  
*Digital Scholarship in the Humanities*  
 European Summer School in Digital Humanities 2021, Leipzig
- 2020 Informatik 2020 InfDH Workshop, Karlsruhe  
 ECCV 2020 Visart Workshop, Glasgow  
 ACM Multimedia 2020 SUMAC Workshop, Seattle  
 DH 2020, Ottawa
- 2019 European Summer School in Digital Humanities 2019, Leipzig

### **PROFESSIONAL ORGANIZATIONS**

German Studies Association (GSA), Member  
 German Studies Association DH Network, Coordinator  
 UC Santa Barbara Graduate Center for Literary Studies, Board Member  
 DHd (Digital Humanities in German-speaking Countries)/ADHO, Member  
 Society for the Social Studies of Science (4S), Member  
 Society for Literature, Science & the Arts (SLSA), Member  
 Arbeitskreis Digitale Kunstgeschichte, Member

### **ACADEMIC SERVICE**

- 2023-24 Campus AI and Human Creativity Summit Planning Committee, Member  
 Department Faculty Legislature Representative  
 College Search Committee for English Department DH Professorship, Member  
 Campus Search Committee for Library DH specialist, Faculty Representative  
 Department Committee on Diversity, Equity, and Inclusion, Member
- 2021-23 Department PLO Assessment Committee, Member  
 Campus Creative Computing Minor Advisory Group, Member  
 Department Committee on Diversity, Equity, and Inclusion, Member

### **COURSES DEVELOPED**

- 2020- GER / C LIT 155, UC Santa Barbara: Critical Artificial Intelligence  
 GER / C LIT 152, UC Santa Barbara: Digital Humanities Practice  
 GER / C LIT / ART HIST 163, UC Santa Barbara: Digital Visual Studies  
 GER108, UC Santa Barbara: Media and Politics: Alternative Histories  
 C LIT 200 / MAT594X, UC Santa Barbara: Artificial Intelligence Images (graduate)

- C LIT 200 / MAT 5940, UC Santa Barbara: Critical Machine Learning Studies (graduate)  
GER 179C, UC Santa Barbara: Media Technology: Computing Cultures
- 2019-20 FAU Erlangen-Nürnberg: Critical Machine Vision (graduate)  
FAU Erlangen-Nürnberg: Computer als Medium der Kunst (graduate)
- 2018-19 ART 185AI, UC Santa Barbara: Machine Learning and The Arts  
MAT 595SP, UC Santa Barbara: Aesthetics and Politics of Artificial Intelligence (graduate)

### **STUDENT SUPERVISION**

- 2023-24 Jinx Martinez, UC Santa Barbara, Honors Thesis  
Toby Fuchs, UC Santa Barbara, Faculty Research Assistance Program  
Paul Kim, UC Santa Barbara, Graduate Student Researcher  
Qiaoyu Cai, UC Santa Barbara, Graduate Student Researcher
- 2021-22 Naja le Fevre Grundtmann, Copenhagen University, PhD Defense Committee