# **Andres Villa Torres**



Mexican media artist, designer and software engineer based in Zurich since 2011. He has participated in numerous group exhibitions, performances, residencies, and solo exhibitions across Europe, Asia, the USA, and Mexico. After an extended presence in academia, Andres has been active in recent years as a Tech Lead and Software Engineer in the startup sector in Europe, working in areas such as EduTech, Decision Science, Data Science, Machine Learning, and Computer Vision.

## Prizes

**Bronze Best of Swiss Web, Agree, 2024,** Category Technology. Role: Tech Lead. Led the technology team to develop innovative solutions, resulting in a bronze medal in the Technology category in collaboration with Dezentrum and Mutoco.

**Gold Best of Swiss Web, Evulpo, 2024,** Category Public Value. Role: Former CTO. Contributed significantly to the product's development and technology strategic and innovation direction, laying the groundwork for its later recognition with a gold medal.

**Silver Best of Swiss Web, Evulpo, 2022,** Category Startup. Role: CTO. Directed the technology strategy, innovation strategy and development efforts, securing a silver medal in the Startup category.

# Languages

- Spanish: native
- German: professional
- English: bilingual
- French: basic

# **Personal Interests**

Art, philosophy, technology, algorithms, building things, experimental and jazz music, swimming, skateboard, reading, writing, playing piano and guitar

# Contact

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# Working Experience

### Agree AG Tech Lead

9/2023 - Present

Competencies: Tech Strategy, Architecture, and Engineering for Decision-Making SaaS platforms.

Tech Stack: SvelteKit (TS and JS), PostgreSQL, AWS, Supabase, Stripe, Zapier, Courier.

Achievements:

- Released V2 with integrated payment system, API, cloud file system, media integration, and rating system.
- Led multiple successful product releases.
- Developed Business Intelligence strategies and analytics.

Evulpo AG (Previously Schlaufux)	5/2021 - 7/2023
Chief Technology Officer	12/2021 - 7/2023

Competencies: General Management, Innovation and Research Strategy, Business Strategy, CI/CD, REST API Design and Development, Database Architecture, Machine Learning Strategy and Integration

Tech Stack: Laravel, PHP, node.js, JS, reactJS, AWS, SQL, Tensorflow, Cloud Architecture, Mixpanel, Stripe, Jira, and Monday-DEVS

Achievements:

- Refactor and relaunch of the rebranded International Platform.
- Expanded the platform to 6 new countries and implemented revenue technology (Stripe) within the first half year, with a growth of 200 to 4000+ new daily active visitors and 200+ new daily registrations, a churn rate of 5% and a stable acquisition positive trend since September 2022.
- Redesigned the Database and Platform Architecture from a multi subdomain to a load-balanced multi-region application.
- Reduced the release cycles from Quarterly to Biweekly Releases
- Introduced multiple Machine Learning production-ready solutions for recommendation systems, activity prediction, and automation of content generation.
- Established a continuous technology innovation and research strategy where we developed AI solutions and VR/AR learning environments.
- Successfully grew the team from 2 to 12 Engineers and Developers.

### Software Engineer and Interaction Designer

#### 5/2021 - 12/2021

Competencies: Developing a Learning Platform. Strategies for Learning Experience, Content Interactivity and Automation for Production of contents. TechStack: Web Solutions, Laravel, PHP, node.js, JS, reactJS

### MyoSwiss +ZHdK Interaction Design R&D Research Associate

### 10/2019 - 2/2021

Competencies: UX Consultant for MyoSuit Exoskleton's Use Cases in an Innosuisse funded Project. Teaching in BA and MA Level Interaction Design and Design Students.

TechStack: Web, JS, nodejs, reactjs, Python, threejs, python, arduino, p5JS , physical, computing, digital fabrication

### Collegium Helveticum (ETH / ZHdK / UZH), Zurich 11/2017 - 11/2019 Research Associate at Fellow Program: "Digital Societies"

Ehnographic research and co-author for publication 'DATA CENTERS. Edges of a Wired Nation'.

Development of an electronic device and data management system for monitoring electromagnetic and WiFi radiation in the everyday life towards hints of deterioration of cognitive habilities.

TechStack: Web Solutions, JS, Python, Open Frameworks, reactjs, nodejs threejs, p5js, linux, digital fabrication, physical computing

### HSLU Digital Ideation, Luzern Teaching Assistant

3/2017 - 8/2017

Teaching Web Technologies in BA Digital Ideation. Technical Support in BA Student Projects. Diploma Exhibition Design.

TechStack: Web, JS, reactjs, nodejs threejs, p5js, linux

## **Working Experience**

### Sooft Studio (previously Labor5020) Co-Founder & Tech Lead

Sooft Studio is a Human-Computer Interaction Design and Software Studio specializing in public and social technology, leveraging networks, web solutions, and data. Our expertise spans Design, Software Architecture, Web Development, Data Science, Business Intelligence, Decision Science, Electronics, Robotics, Immersive Technology, and a diverse tech stack that includes JS, Python, PHP, SQL, React, Laravel, WebXR, Linux, Arduino, Android, Swift, prototyping, physical computing, and digital fabrication.

#### Ability GmbH + ZHdK, Interaction Design R&D 2/2012 - 8/2015 **Research Associate**

Project Management & Development of A-Int and EFS Research Projects funded by CTI (today Innosuisse). Other activities included Teaching BA Level.Interaction Design Students

TechStack: Web, JS, Python, threejs, python, arduino, p5js, processing, linux

### Projektil, Zurich Visual Artist

2D & 3D Animation, Projection Mapping and Audio Visual Shows. TechStack: Web, JS, Arduino, Blender

# Esrawe Studio

9/2008 - 1/2010

11/2011 - 2/2012

## Industrial Designer

Project Management and Design Production of Furniture, InteriorArchitecture and Integral Spaces. Activities included: 3D Modelling, Technical and Constructive Drawing, CGI and Rendering, Production Processes, Installation.

TechStack: Rhinoceros 3D, AutoCAD, 3D Studio Max, Blender, Prototyping

# **Academic Education**

<b>PhD Digital Anthropology -&gt; 'On Algorithmic</b> <b>Agency'</b> at Graduate School of the Arts and Humanities, University of Bern	8/2019 - 2022 Paused
<b>MA Research on the Arts</b> . Institute for Social Anthropology. Focus: Digital Anthropology. University of Bern.	9/2017 - 7/2019
<b>MA Contemporary Arts Practice.</b> BFH, Hochschule der Künste Bern	8/2015 - 7/2017
CAS in Research. ZHdK/HKB/HEAD.	8/2012 - 7/2013
<b>MA in Human Computer Interaction Design</b> . ZHdK.	1/2011-7/2012
<i>Licenciatura (BSc. equivalent) in</i> Industrial Design. UAM Xochimilco, Mexico	3/2004-9/2008

## Additional Training

Certification on Machine Learning: Models and Data for Applied Artificial Intelligence, Simplilearn	12/2022 - 2/2023
Certificate on Decision Intelligence, Course by Cassie Kozyrkov, LinkedIn Learning	10/2023
Certificate on Machine Learning Foundations: A Case Study Approach. University of Washington, Coursera.	02/2024
Certificate on SQL for Data Science, UC Davis, Coursera.	02/2024
Certificate on A/B Testing, Data Wrangling, Analysis, UC Davis, Coursera.	03/2024
Distributed Computing with Spark SQL, UC Davis, Coursera.	04/2024
Certificate on Machine Learning: Regression Models, University of Washington, Coursera.	04/2024

2015 - Present

## Output List

### **Teaching & Workshops**

Bits and Atoms. Series of Lectures on Web Technologies, IAD, ZHdK. 3/2020 - 5/ 2020. Bridging Material Science and Interaction Design. Workshop. Lorentz Center, Leiden, NL, 1/2020. Sonic Interaction Design. BA Course. Zürich University of the Arts. 1/2020 Reality Check. Workshop for the MA Design Class. ZHdK. 12/2019 Data, Self, and Bodies. Workshop for a BA Course. IAD, ZHdK. 11/2019 Unfolding Algorithmic Agency. Participatory workshop Otherwise Festival, H0Institute, Gesnerallee, 3/2019 Introduction to the WEB, BA Course, Digital Ideation, HSLU. FS2017 Live Coding Workshop, N/O/D/E, Lausanne 30/1/2016 Live Coding Workshop, FHNW Brugg. 10/2015 Live Coding Workshop, Kassette, Zürich. 6/2014 Embodied Interaction Advanced, IAD, ZHdK HS2013 & HS2014 normiCity, questioning the hyper-regulated Urban. reART The URBAN, Gesnerallee, Zürich, 10/2012 Supercollider Workshop, IAD, ZHdK 4/2012

### Grants

Pro Helvetia, Residency Grant for Artistic Research. "Signal Topographies", 9/2020-1/2021.
Pro Helvetia, Production Grant for Visual Arts. "Signal Polarities", Summer 2019.
Pro Helvetia, Production Grant for Visual Arts. "Critical Mass", Summer 2018.
Pro Helvetia, Production Grant for Interdisciplinary Project: "Narcissus", Summer 2016
Artistic Grant for Connecting Spaces, Project "Odd Couplings, Group Performance", ZHdK 2015
CTI Research Funding for Research Projects "A-Int" and "EFS" in cooperation with former Ability GmbH and
Interaction Design Research from the Zurich University of the Arts 2013 & 2014
Z+ Funding for Art Project "Instant Favelas" 2011 & 2012
Gamil Stiftung. Funding for the MA Thesis at the Zurich University of the Arts 2011

### Publications

Pereda, J., Murrieta-Flores, P., Villa Torres, A. An ontological approach for unlocking the Colonial Archive. ACM Journal on Computing and Cultural Heritage, 2023.

Villa Torres, A.; "Rituals of Extinction and Domestication #1 & #2". At The Book of X 10 Years of Computation, Communication, Aesthetics and X., 2022. Editors: Miguel Carvalhais: i2ADS and Faculty of Fine Arts, University of Porto; André Rangel: Universidade Católica Portuguesa, CITAR and Faculty of Fine Arts, University of Porto; Luísa Ribas: Universidade de Lisboa, Faculdade de Belas-Artes, Centro de Investigação e de Estudos em Belas-Artes, CIEBA; Mario Verdicchio: Università degli Studi di Bergamo. ISBN: 978-989-9049-25-3 Villa Torres, A.; "Convoluted Alterity". At xCoAx 2020 Proceedings of the Eighth Conference on Computation, Communication, Aesthetics & X. 2020. Edited by André Rangel, Luísa Ribas, Mario Verdicchio, & Miguel Carvalhais. ISBN: 978-989-746-266-5

Villa Torres, A. Algorithms: the dark constitution of the new world. In Arts in Context. Kunst, Forschung, Gesellschaft. HKB. September 2020. ISBN: 978-3-8394-5322-3. <u>Open Access Link.</u>

Villa Torres, A. Short Essay: "On Long Term Storage" in Monika Dommann, Hannes Rickli, Max Stadler (eds.) Data Centers, Edges of a Wired Nation. Lars Müllers Publishers. 2020. ISBN 10: 3037786450. <u>Link</u>.

Villa Torres, A. "Signal Polarities." At xCoAx 2019 Proceedings of the Seventh Conference on Computation, Communication, Aesthetics & X. Edited by Mario Verdicchio, Miguel Carvalhais, Luísa Ribas & André Rangel. September 2019. ISBN: 978-989-746-220-7

Franinovic, K., Franzke, L., Villa Torres, A., Wille, F.; Interacting with Electroactive Polymers in Responsive Environments, Tangible, Embodied and Embedded Interactions, Tempe, AZ, USA, March 17-20, 2019.

Villa Torres, A.; "Critical Mass". At xCoAx 2018 Proceedings of the Sixth Conference on Computation, Communication, Aesthetics & X. Edited by André Rangel, Luísa Ribas, Mario Verdicchio, & Miguel Carvalhais. ISBN: 978-989-746-171-2

Villa Torres, A.; Danzinger E.; "NarcissUs: machine learning from machine learning from machine learning from machine". At xCoAx 2016 Proceedings of the Fourth Conference on Computation, Communication, Aesthetics & X. Edited by Mario Verdicchio, Alison Clifford, André Rangel & Miguel Carvalhais. ISBN: 978-989-746-094-4

Kuppanda, T. ; Neate, T. ; Jiajun Yang ; Torres, A.V., "Reproducible sonification for virtual navigation", in VR Workshop: Sonic Interaction in Virtual Environments (SIVE), 2014 IEEE.

Villa Torres, A., Kluckner, V. and Franinović, K., "Development of a sonification method to enhance gait rehabilitation", In Proceedings of the ISon: Interactive Sonification Workshop, Fraunhofer IIS, Erlangen, Germany, 2013.

Avila, E., Baena, C., Leidescher, H., Velasco, P., Villa Torres, A., "Instant Favelas: Sustaining the Unsustainable", in MIND THE GAP, Kunsthof Zürich, Materialien und Dokumente 1993–2013, Edition Fink, Zürich 2013, ISBN 978-3-03746-177-8

Villa Torres, A., Franinovic, K., Huggenberg, J., "Auditory Feedback for Walking Rehabilitation", in proceedings of the 8th Swiss Design Network Symposium Disruptive Interaction, Lugano, Switzerland 9 November 2012. ISBN: 978-88-7713-680-0

### Software, Instruments and Devices

**Foot-Sensor-Plates, Auditory Feedback System and Interactive Therapy Evaluation System** for measuring and guiding the effort applied by patients on a Gait Rehabilitation Robot Lyra®. Developed at ZHdK between 2013-2015 and handed over to the former CTI spinoff ABILITY Switzerland for clinical trials in collaboration with ZHAW. Work unpublished. Public Documentation: <u>Link</u> **Environmental Monitoring Instruments and Data Management Software** for field recordings from geolocated WiFi, Electro Magnetic, visual and audible signals. Developed at Collegium Helveticum between 2017-2019. Handed over for user trials to the "Dynamics of Healthy Aging" group from the UZH leaded by Dr. Christine Röcke and Prof. Dr. Mike Martin. Work unpublished. Public Documentation: <u>Link</u>

### **Exhibitions and Installations**

**LABOR - Digital Art.** Group Exhibition with Paula Tyliszczak and Mara Röllin. Kunsthalle Schaffhausen (Vebikus). - 8/2020.

**Fluorozoa. Light Installation.** by Labor 5020 (Simon Schwarz, Sandro Poli & Andrés Villa Torres). Part of Sensorium for the European Innovation Festival hosted at Gucci Hub. Curated by H-Farm and Fast Company in Milano, 7/2019.

**LOVE. Interactive Light Installation.** Part of Sensorium for the European Innovation Festival hosted at Gucci Hub. Curated by H-Farm and Fast Company in Milano, 7/2019.

**Signal Polarities, Data Installation.** At xCoAx 2019, Group Exhibition, Careof, La Fabbrica del Vapore. Organised by the Politecnico de Milano, 7/2019.

**Electric Animal Plant**, **Interactive Installation.** K. Franinovic, L. Franzke, A. Villa Torres, F. Wille, Group Installation, TEI Conference, Tempe, AZ, USA, 3/2019.

**Fluorozoa, Light Installation.** By Labor 5020 (Simon Schwarz, Sandro Poli & Andrés Villa Torres), Lucerne Light Festival, Lucerne, Switzerland, 1/2019.

**Fluorozoa, Light Installation.** By Labor 5020 (Simon Schwarz, Sandro Poli & Andrés Villa Torres), Temp Studio, Lisbon, 11/2018.

**Critical Mass, Net Installation.** At xCoAx 2018, Group Exhibition, c arte c, Museo del Traje, Madrid, 7/2018. **On Concave Mirrors. Solo Exhibition,** Kulturfolger, Zürich, 5/2018.

Public Property, Net Installation, J. Huggenberg & A. Villa Torres, Playground, London, UK, 19/2017.

**Electric Animal Plant, Interactive Installation.** K. Franinovic, L. Franzke, A. Villa Torres, F. Wille, Group Installation, Zurich Design Biennale, Old Botanical Garden, 9/2017.

**Silk Memory Garden, Interactive Installation.** Digital Art, Concept and Programming in Commissioned Installation for Francois Chalet, Zurich Design Biennale, SBB Werkstatt, 9/2017

Narcissus: machine learning from machine learning from machine..., Interactive Installation. Group Exhibition, PasquaArt Centre, Biel, Switzerland. 6/2017

Critical Mass, Net Installation. Group Exhibition, PasquaArt Centre, Biel, Switzerland, 6/2017

**SOLO: Sound and Light installation.** Exploring the limits of responsive materials, with K. Franinovic Laokoon Festival, Zürich, 11/2016.

Narcissus: machine learning from machine learning from machine..., Interactive Installation. xCoAx 2016, Group Exhibition, GAMec, Bergamo, Italy, 7/2016

Sense, Regression, Transition. Multimedia Installation. AFFAIRE, Group Exhibition, PasquArt Centre, Biel,

### Switzerland 6/2016

Patterns of reconciliation, Group Exhibition. Kasko, Wartek, Basel, Switzerland 3/2016
Instant Favelas, Installation Series in Urban Spaces. Collective Project by Eloisa Ávila, Claudia Baena, Andrés Villa Torres, Zürich, 2011- 2013.

## Performances

Live Coding. Notes on Concave Bubbles. Kulturfolger, Zürich, 3/2018 Live Coding. Migrants 2.0, Fabrica Digital El Rule, Mexico City, 12/2017 Live Coding. Algorave. Centro Larva, Ciudad Creativa Digital, Guadalajara, 12/2017 Live Coding. Noises of Forgetting, Solo Performance for the ICLC, CMMAS, Morelia, Mexico, 12/2017 Live Coding. Transmutations, Group Performance for the ICLC, CMMAS, Morelia, Mexico, 12/2017 Live Coding. Performing Sound. Galerie 5020, Salzburg, 3/2016 Live Coding. Algorave, STEIM at Splendor, Amsterdam, 2/2016 Live Coding. Algorave, N/O/D/E Festival, Lausanne, CH, 1/2016 Live Coding. Concert-Talk, FHNW, Brugg, CH, 10/2015 Live Coding. Algorave Tour, Fukuoka, Osaka, Kyoto, Tokyo, Japan, 10/2015 Live Coding. Warp Hole Sounds, ICLC 2015, Leeds, UK, 7/2015 Odd Couplings, Group Performance, ZHdK, Zürich, 5/2015 Live Coding. Ludicious Game Festival, Zürich 9/2014 Live Coding. Supercollider Talks, N. K., Berlin 7/2014 Live Coding. Post Apocalypse. Rote Fabrik, Zürich 6/2014

## **Art Residencies**

ABA - AiR Berlin Alexander Platz. Funded by ProHelvetia. Project "Signal topographies. Citizen observatories for data and signal pollution". 9/2020 - 2/2021. Temp Studio #3, Lisbon, 11/2018

## Demos

Villa Torres, A., Danzinger, E., "Narcissus: machine learning from machine learning from machine", in MASH'D Arts Track Sessions at the 14th IEEE International Symposium on Mixed and Augmented Reality, ISMAR 2015, Fukuoka, Japan, 9/2015

Villa Torres, A., Franinovic, K., Huggenberg, J., "Adaptive Rhythmic Auditory Feedback through Walking Gestures" at the Swiss Design Network Conference "Disruptive Interactions". SDN Symposium 2012, Lugano, 11/2012.