

Andrea Montaldo

AI Engineer · Senior Data Scientist · Educator

andrea@montal.do · montal.do

ABOUT



Profile

Three operations recur in everything I build: making machines read what was written for people, and vice versa; simulating what cannot be tried out in real life; automating what used to be done by hand. I have designed and developed AI-based systems since 2015, focusing on editorial automation, generative systems and workflows applied to design.

I work from Cagliari, primarily remotely, with organisations and teams in Italy and abroad. I have operated as a sole proprietor since 2012 and I am the founder, sole partner and director of Deweave Srls. Alongside my professional practice, I teach on an ongoing basis at IED Cagliari and in corporate training settings.

Skills

AI & MACHINE LEARNING	Predictive and statistical models, model and dataset validation, categorization of banking transaction data, computer vision, recommender systems · PyTorch, TensorFlow, fast.ai
GENERATIVE AI	LLMs, RAG, embeddings, generative models · agent-based automation, conversational agents over databases, AI-assisted development
TEXT & VOICE	Semantic search, information extraction and classification from text, automatic summarization, social stream and network analysis, voice interfaces and text-to-speech
DATA	ETL pipelines, ingestion and scraping from heterogeneous sources, analysis over billions of rows, geospatial data and search · PostgreSQL/PostGIS, ClickHouse, Elasticsearch
SIMULATION & FORECASTING	Techno-economic calculation engines, consumption forecasting, interactive simulators of complex systems
INFRASTRUCTURE	Cloud and on-premises architectures, containers and orchestration, CI/CD, monitoring and Linux administration · AWS, Google Cloud, Docker, Kubernetes, Terraform
DEVELOPMENT	Web and mobile applications, REST and GraphQL APIs, CMS · Python, JavaScript, Django, React Native, Svelte, WordPress, Drupal

ANALYSIS

Assessments and feasibility studies, KPI definition, custom interactive charts and dashboards, technical documentation

DESIGN & CREATIVE CODING

UX, UI and interaction design, prototyping, accessibility, typography ·
generative art, interactive installations, wearables and physical computing

SELECTED



Featured projects

Making machines read what was written for people, and vice versa

ANNA · reading thousands of news stories so the newsroom can write one

RGS SEMANTIC ENGINE · the State Budget, which no one manages to read, learns to answer questions

ULTRALEGGIBILI · the same text at several levels; the page stops being a barrier

PERCEPTION · social media read, not just counted: who drives a topic, where it spreads, with what sentiment

SINNOS · tourism data, written for machines, translated into the language of travellers

EOSC · open science, measured in dozens of ways and read at a glance

Simulating what cannot be tried out in real life

REC-UP · an energy community built in numbers before it exists in the world

JOULE · consumption metered hour by hour, and forecast before it becomes a bill

TREASURE HUNT · four riddles, four degree courses: a future to try before choosing it

Automating what used to be done by hand

EAAE 2026 · registrations, fees, abstracts and invoices: what used to be spreadsheets and patience is now a single flow

ARCHITETTURACAGLIARI.IT · updating the Faculty's website becomes a gesture, not a chore

DATA ALLIANCE · the data a company piles up and leaves idle, put back to work

ZETA · the newsroom changes every year; the craft stays in the platform



Professional experience

Andrea Montaldo · Sole proprietorship

CONSULTING AND DEVELOPMENT · 2012 – PRESENT

Independent professional practice, still active: many of the works in this portfolio (data science and AI consulting, web and mobile platforms, teaching and corporate training) were carried out independently through the sole proprietorship.

Faire Labs / Faire.ai · Lead Data Science & Analysis Consultant

FINTECH · JUN 2023 – AUG 2025

Lead consultant for data science, machine learning and data analysis in support of Faire's projects, with a cross-cutting role spanning technical validation, model development, KPI analysis, documentation and knowledge transfer.

- Technical validation of augmented datasets and predictive models: statistical analyses and performance metrics to verify their quality, consistency and reliability.
 - Support for predictive and PD models: review of logistic regressions, output checks and assessment of methodological robustness.
 - Definition and analysis of monthly KPIs and operational metrics; development and optimization of models, libraries and data pipelines; transaction-data categorization systems and account reconciliation.
 - LLM conversational agent for customer support that queries the database and answers with tables and charts generated in real time.
 - Technical governance: reports and documentation to make analyses traceable and verifiable; knowledge transfer and hands-on support for the team.
-

Deweave · founder and sole director

NLP AND DATA INTELLIGENCE PRODUCTS · 2018 – 2022

- **ANNA**, an NLP system for data-driven journalism: automatic source ingestion, topic modeling, summarization, NER on custom deep learning models.
- **Data Compass**, a fake-news countering platform based on source analysis, user voting and semantic analysis of content.
- **Meaning for Mining**, social-stream analysis software with sentiment, network analysis and near-real-time volumetric analytics. Registered with SIAE, 2019.

AI/NLP consulting for enterprise clients

SELECTED · 2015 – 2022

- **Ragioneria Generale dello Stato**, Italy's State General Accounting Department (via Almagiva, 2021): semantic engine for voice search over the State Budget.
 - **LUISS Data Lab · Zeta** (2021): the Master in Journalism's news outlet, with Alexa integration and AI-driven conversational models.
 - **RAS / Sardegna Turismo · Sinnos** (via CRS4, 2020–2022): middleware with NLP search, semantic autocomplete and a recommendation system.
 - **EOSC** (2021): design and PoC of the Europe-wide readiness-indicator monitoring dashboard.
 - **Alkemy / DEEP** (2015–2018): privacy-preserving recommendation system for e-commerce.
 - **Jakala · Data Alliance**: data management platform for data segmentation and programmatic activation.
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Alkemy Tech / TSC Consulting · consultant

DATA PLATFORMS AND DIGITAL PRODUCTS · 2013 – 2019

Recurring consulting on analysis, high-traffic architectures and platform development: industrial research projects (DEEP, INMOTO, NextShop, ProtectID, SON), editorial products and web platforms (SIAE, Riotta.it, Semèstene), process analysis for Vodafone and Mediaset.

IN THE CLASSROOM



Teaching

IED Cagliari · Media Design

FIRST-LEVEL ACADEMIC DIPLOMA, BA-EQUIVALENT (DAPL08) · 2022 – PRESENT

Course leader for **Multimedia Design 2 and 4** and **Multimedia Languages 2**. AI is structurally integrated into the syllabus:

- **Vibe coding and assisted development.** In programming classes (Svelte, JavaScript) students use the LLM as a pair programmer to produce interaction-dense interfaces: micro-animations, state transitions, reactive components, generative layouts. The prompt is a tool for visual iteration as much as for writing code.
- **Game design with AI-generated assets.** A complete game design course: mechanics, dynamics, aesthetics, narrative. Students design and build a game from idea to playable prototype, with assets (images, audio, video) generated entirely through AI workflows (image-to-image, generative sound design with Suno, video generation) and rigorous documentation of prompts, iterations and discards.
- **Theses and projects.** Supervision of theses that integrate generative AI into the production pipeline; assessment oriented to awareness of use, not just the quality of the final result.

Course "AI for graphics and communication"

PROFESSIONAL TRAINING · BASSANO DEL GRAPPA · 2026

Seven days, between classroom and online, for graphic designers and communicators who want to use generative tools with method: not prompt recipes, but the mental model that holds when the tools change. Theory (how the models work, context, judging the output, rights and commercial use) interwoven with continuous labs on text, image, video and advanced pipelines, inside the Adobe suite and beyond. Each participant works on a real brand of their own throughout the course, up to the final project. An original course reader of more than thirty sections, with visuals, step-by-step guides and exercises, written for the course.

Workshop "Data, Creativity and User Experience"

VILLANOVA COWORKING

A workshop where the LLM is treated as a creative engine in a two-phase flow: **data-driven analysis** (extracting themes, entities and angles from textual sources) and **generative design** (narrative brainstorming, drafting titles and copy for different formats, rapid iteration on tone and length). AI speeds up the process but does not replace it: final review and translation into visual output remain the designer's work.

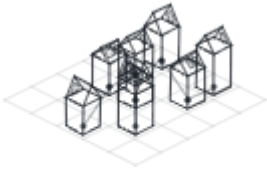
Corporate training · software development

2023 – 2024 · PROGRESSIVE INTRODUCTION OF AI TOOLS INTO THE DEVELOPMENT WORKFLOW

COURSE	CLIENT	DURATION	PERIOD
Linux for System Administrators	Data Management	32h	Apr 2023
Practical XSLT / XPath	Data Management	32h	May 2023
MongoDB basics and advanced querying	Data Management	24h	Jun 2023
SQL Server: T-SQL development	Data Management	24h	Jun 2023
Linux for System Engineers	Data Management	32h	Jul 2023 – May 2024
Angular & RxJS	Data Management	16h	Sep–Oct 2023
Docker Essentials	Data Management	24h	Feb 2024
Angular 17	Belron	28h	Sep–Oct 2024



Project archive



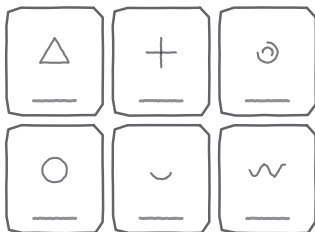
seal · isometric grid
(8+9) · seed rec-up

REC-UP · Platform for Renewable Energy Communities

DICAAR · UNIVERSITY OF CAGLIARI · 2024 – 2025

Working out whether an energy community is worthwhile, for an apartment building as for a public administration, takes energy, regulatory and economic expertise all at once, and almost none of the people involved have it. For DICAAR I built the platform that walks you from energy literacy to techno-economic evaluation (rec-up.it). It combines an educational CMS with visual storytelling, an interactive isometric narrative on the birth of a REC, a playable simulator for exploring energy and decision dynamics, and a calculation engine for realistic simulations of production, self-consumption, energy flows, incentives and payback over multi-year horizons.

A modular, scalable architecture built for reuse in different territories, with strong attention to UX, accessibility and the translation of complex models into readable visualizations.



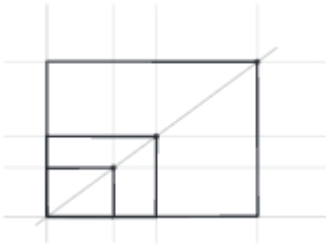
seal · the same passage
at three readings (7+9) ·
seed ultraleggibili

Ultraleggibili · Accessible multi-level digital reading

ULTRABLU APS · 2024 – ONGOING

The same text does not reach every reader: for someone with dyslexia, a cognitive disability, or who is still learning the language, the page as it stands remains a barrier. For Ultrablu I am building the ecosystem (universal design, multimedia, artificial intelligence) that makes the same content usable at several levels (ultraleggibili.it): visual reading with pictograms and audio, simplified text with contextual annotations, a typographically faithful rendering of the original, assisted paraphrase. Each level comes with advanced personalization (typography, colors, highlighting, text-to-speech) to reduce cognitive load.

A hybrid architecture with a reactive application, dedicated APIs, single and bulk text-to-speech, editorial tools for multi-level content and AI reading-support components, in the service of educational publishing.



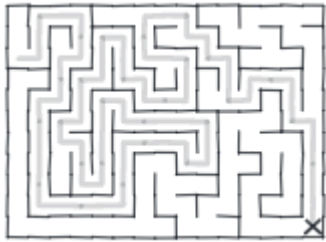
seal · the same
proportion at three
scales (7+8) · seed eaae-
2026

EAAE Cagliari 2026 · Conference platform

EAAE · UNIVERSITY OF CAGLIARI · 2026

Behind the scenes, an international conference is an operational flow that usually fragments across external services and spreadsheets: registrations, fees, abstracts, bookings, invoicing. For the Annual Conference & General Meeting of the European Association for Architectural Education, hosted by the University of Cagliari, I built the website and management system that gather everything into a single place (eaaecagliari2026.it). Beyond the editorial sections (program, keynotes, tours, accommodation), the platform handles:

- Wizard-based registration with per-category fees and an early-bird window, tour and Gala Dinner booking with seat and sold-out management, dietary requirements and billing details.
- A call for abstracts with thematic sessions, co-authors, length limits checked in real time and PDF uploads.
- Transactional emails, CSV exports for the secretariat, data migration between system versions and anti-spam protections.

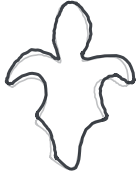


seal · maze (8+0) · seed
caccia-al-tesoro

Treasure hunt · IED Cagliari Open Day

IED CAGLIARI · 2026

Student orientation almost always means frontal presentations, which a visiting student forgets in a hurry. For the Villa Satta Open Day I turned choosing a course into a game: four riddles, one per degree course, scattered across the campus and reached via QR codes. Each station is a web app with art direction dedicated to the course's identity: a procedurally generated floor-plan maze for Interior Design, an editorial game of slogans and audiences for Communication, a pixel-art arcade for Media Design, a tactile experience about fabrics for Fashion. The digits collected at the stations open the padlock on the treasure chest. Concept, game design, dependency-free development tested on low-end devices, graphics for the game materials and production coordination.

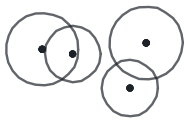


seal · the logo, noise on
anchors and handles (2) ·
seed domantiglia

Domantiglia · House museum and community photo archive

SA BUTEGA DE TZIA DOMANTIGLIA · 2026

A community photo archive survives only if it does not depend on the software hosting it: if the metadata live in a separate database, sooner or later they get lost. I built the bilingual website of this experiential house museum (domantiglia.it), with cultural events, workshops and hospitality, around that principle and around the community's historical photo archive, over 4,000 images. The metadata travel inside the files: a purpose-built XMP/IPTC parser, dual master/web copies and automatic write-back of editorial changes into the original JPEG, so the archive remains self-supporting even outside the CMS. Access by "fonds" with layered visibility (public, on-site consultation), an infinite-scroll gallery with lightbox, batch imports from the command line, and a generative logo redrawn on every visit with Perlin noise.



seal · clustering (10+4)
· seed emc2

EMC2 · Portal for Renewable Energy Communities

UNIVERSITY OF CAGLIARI · DEPT. OF HUMANITIES, LANGUAGES AND
CULTURAL HERITAGE · 2025 – 2026

Energy communities are taking root across Sardinia, but anyone trying to understand what they are, where they are and how to start finds information scattered between technical and institutional sources. For the Department of Humanities, Languages and Cultural Heritage I built the platform that brings them together, focused on Sardinia (emc2cer.it): an interactive map of the communities with filters, search and clustering, fed automatically by the official GSE APIs and by collaborative maps, with incremental updates of the points; a glossary of over sixty terms in five languages (Italian, English, Spanish, French, Chinese) with fuzzy search; an interactive branching guide for citizens, institutions, installers and facilitators; automatic monitoring of calls and regulations from more than eighteen institutional sources, with relevance-based classification of the news.



seal · perturbed grid
(8+0) · seed
architetturacagliari

architetturacagliari.it · Faculty of Architecture

UNIVERSITY OF CAGLIARI · 2025

A faculty website ages at the speed of its events: if updating it is a chore, it stops being updated. For the Faculty of Architecture in Cagliari I built a platform designed first of all for the people who tend it (architetturacagliari.it): featured events with multi-day scheduling, an interactive monthly calendar, an archive of research groups with detail pages, photo galleries and attachments, dynamic search and filters. WordPress with a custom child theme and Bootstrap 5, optimized event-retrieval queries, deferred loading of images and scripts, mobile-first design and accessibility built with ARIA labels.



seal · graphs +
clustering (10+4) · seed
anna

ANNA · NLP for data-driven journalism

DEWEAVE & CATCHY · 2021 – 2022

A newsroom working with data has to read more news than one person could ever open. ANNA, which I designed and developed with Deweave, builds its own repository from a list of web sources and keywords, and supports the entire analysis cycle on a scalable data lake: continuous near-real-time ingestion, enrichment, exploration and modeling.

- Bias-free topic modeling (NMF, cosine similarity, single-linkage clustering) with automatic naming of topics.
- Automatic summarization (SBS and DBS), NER trained on custom deep learning models, ranking with BM25 variants of tf-idf, full-text search with a GIST index.
- Analytics on the popularity of topics and stories, influencers, trends and outliers, with timelines and chronological maps.
- RESTful APIs for integration into existing platforms such as Truly Media and TruthNest.



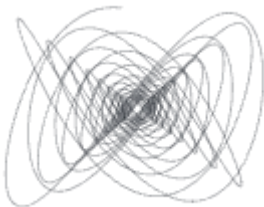
seal · poisson-disc
(0+10) · seed sinnos

Sinnos · Official tourism app of the Region of Sardinia

RAS VIA CRS4 · 2020 – 2022

The region's tourism data lived in heterogeneous APIs, with uneven quality and no interface designed for travellers. For the official Sardegna Turismo app (App Store, Google Play) I designed and implemented the data middleware and the technical foundation that make them usable: ETL for migrating and cleaning data from the regional APIs, a GraphQL layer (Hasura) on PostgreSQL/PostGIS with custom procedures and business logic in PL/pgSQL, JWT authentication.

- Natural-language search with real-time, error-tolerant autocomplete, relevance ranking and snippet extraction.
- A geospatial engine with proximity queries and large-scale clustering of points of interest.
- A recommendation system with low-rank matrix factorization and cold-start mitigation.
- A media pipeline on AWS (S3, CloudFront, Elastic Transcoder, Lambda) provisioned with Terraform; native React Native + Apollo frontend; self-installing Docker environments.

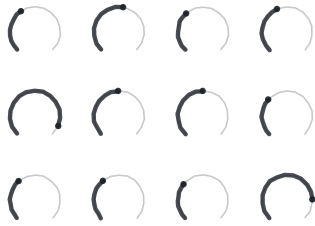


seal · harmonograph (7) ·
seed rgs

Semantic engine for the Ragioneria Generale dello Stato

RGS VIA ALMAVIVA · 2021

Italy's State Budget is a document almost no one manages to read: not even those who have to vote on it. For the State General Accounting Department I designed the concept and prototype of a semantic engine that answers spoken questions about the Atti Dovuti: it interprets the request, computes the figure and returns it wherever it is needed (web, mobile, voice, augmented reality, kiosks), through three types of interaction (physical-digital, AI-driven, pattern-driven), safeguarding the security and integrity of the sources. The service is designed for Members of Parliament during the approval process and, downstream, for citizens, media and the specialized press.



seal · combinatorics
(9+8) · seed eosd

EOOSC · Readiness monitoring dashboard

EUROPEAN OPEN SCIENCE CLOUD · 2021

Measuring how ready European open science really is, country by country, required indicators collected in dozens of different ways. For the federated EOOSC ecosystem I designed the PoC of the dashboard that unifies them: tool selection, automatic and manual data-collection workflows, active monitoring and reporting processes, transparency and actionability mechanisms, beta testing with the national organizations and validation workshops. All the software developed was released under an open source license; the work is documented on Zenodo (DOI 10.5281/zenodo.5595779).



seal · combinatorial
front page (9+6) · seed
zeta

Zeta · News outlet of the LUISS Master in Journalism

LUISS DATA LAB · 2021

A news outlet run by students changes its newsroom every year: the platform has to withstand the turnover without losing editorial quality. For the LUISS Master in Journalism and Communication I designed and developed Zeta's architecture (zetaluiss.it): articles, in-depth features, news bulletins, radio and podcasts, with services delivered in the cloud on open source technologies. Zeta adapts to the importance of the news and to the style set by the journalists through an AI-driven model based on metadata and tags, and integrates Alexa with AI-based voice conversation models.



seal · aggregation
(0+4+1) · seed data-
alliance

Data Alliance · Data Management Platform

JAKALA

The user data a company accumulates stays inert until it becomes segments to act on. Jakala's platform turns large volumes of data (first-, second- and third-party) into activatable audiences: collection from structured and unstructured sources, processing with custom Python ETL, analysis on ClickHouse and Metabase. The programmatic buying function delivers target audience, message, channels and devices to advertisers.

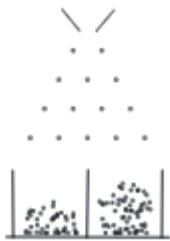


seal · boids (1+4+10) ·
seed perception

Meaning for Mining / Perception · Social data intelligence

DEWEAVE · REGISTERED WITH SIAE, 2019

Knowing how much a topic is talked about on social media is easy; understanding who drives it, how it spreads and with what sentiment is another craft. With Deweave I built the data intelligence service that monitors, analyzes and interprets the streams of the major social networks in near real time: sentiment analysis, network analysis of the relationships between topics and individuals, volumetric analytics, activity and popularity trends, key topics and degree of engagement. A distributed infrastructure (ClickHouse for OLAP analysis, MongoDB, GlusterFS) with databases of billions of rows and about one billion tweets analyzed. Recorded in Italy's special public registry for computer programs (SIAE, 2019).

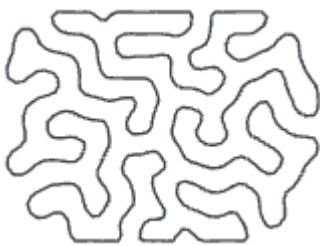


seal · Galton board (0+4)
· seed data-compass

Data Compass · Countering fake news

CATCHY · 2016 – 2018

A "compass" to steer newsrooms and the public away from contaminated sources, crucial during emergencies and breaking news. Each story's assessment combines three signals: source credibility analysis (reputation, track record, cross-confirmation), user voting on how the story is perceived, and NLP semantic analysis of the content (overly emotional language, lack of verifiable sources, sensationalist headlines). I coordinated the development team and curated data visualization dashboards and editorial products.

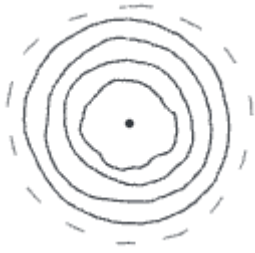


seal · differential
growth (1+4+10) · seed
deep

DEEP · Data Enrichment for Engaging People

ALKEMY · 2015 – 2018

In the data flows between people and machines there is implicit knowledge that usually no one extracts. DEEP was the research project that tried: new models and algorithms for analyzing textual and visual streams, a prototype platform for big data analysis and real-time forecasting, algorithms for data journalism and data visualization systems. My main contribution: the privacy-preserving recommendation system for e-commerce.



seal · radial data (7) ·
seed joule

Joule · Smart metering and energy management

JOULE SRL

Energy you don't measure is energy you can't manage. Joule is an ecosystem for smart metering, consumption monitoring and forecasting integrated with the Joule 4.0 suite, in a cloud architecture on Google services and open source engines: sensors, meters, signal aggregators and smart objects collect data following IoT paradigms, for domestic and industrial installations. I worked on the design and integration of hardware and software, on the analysis and forecasting algorithms, and on the security and reliability of the system.



seal · points +
constraints (4+10) · seed
gymhelper

GymHelper · Computer vision for rehabilitation and fitness

PROTOTYPE · SME INSTRUMENT

Away from the therapist's practice, rehabilitation exercises are often performed badly, and no one notices until they cause harm. GymHelper monitors joint movements through cameras and machine learning, with real-time feedback for users and a web/app interface for therapists. The system finds patterns in the data (the exercises most often performed incorrectly and their correlations with gender, age and health conditions; improvement with assisted execution; the body parts most exposed to stress and injury) and sends alerts when an exercise is performed wrongly, limiting injuries and costs.



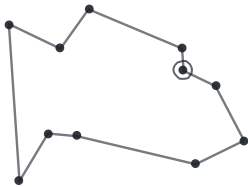
seal · graph +
combinatorics (10+9) ·
seed nextshop-protectid-
son

Industrial research · NextShop, ProtectID, SON

ALKEMY · 2017 – 2019

Three industrial research projects, one same question: what happens when emerging technologies (big data, blockchain, distributed ledgers) meet real commercial processes.

- **NextShop**, an all-encompassing approach to e-commerce: a data- and mobile-driven omnichannel concept store, customer profiling on big data platforms for predictive procurement, payment systems and security in 4.0 transactions.
- **ProtectID**, blockchain in industrial processes and services: pervasive identity & trust for e-commerce, decentralized apps, cryptocurrency in support of mobile payments. Includes the "Machine Learning aggregator" demonstrator (D-All project): collecting an e-commerce site's information, aggregating it by topic, automatic summaries and review KPIs through NLP and topic modeling.
- **SON · Secure Open Nets**: distributed-ledger methodologies and prototypes applied to privacy, the sharing economy and copyright.

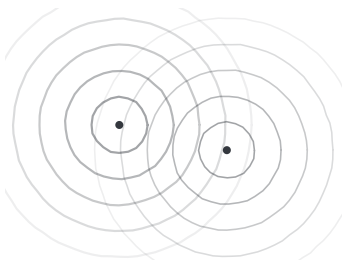


seal · itinerary (10+0) ·
seed inmoto

INMOTO · Information & Mobility for Tourism

TSC CONSULTING · 2013 – 2015

Food and wine tourism is made of small, disconnected actors: producers, territories, travellers who never meet. INMOTO explored web and mobile platforms to make them interact: promotion of food and wine products with multimedia information and geolocation, personalized discovery routes, dynamic e-commerce on the move, Google Glass applications for new tourist itineraries, algorithms for automatic and interactive route computation.



seal · interference (7) ·
seed semestene

Semèstene · Google Glass for Turandot

TEATRO LIRICO DI CAGLIARI · 2014

No spectator has ever seen the opera through the eyes of those singing it. For Puccini's Turandot, Google Glass went on stage: the scenes as seen by the protagonists, streamed live, the melodrama extended to the cloud, social media and live tweeting. I worked on optimizing the network processes and the encoding for the streaming broadcast.

Press coverage: The Guardian · The New York Times · Huffington Post · Il Fatto Quotidiano

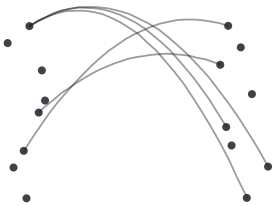


seal · combinatorial
staff (9) · seed siae

SIAE Promo Emergenti

SIAE VIA ALKEMY · 2013 – 2014

Emerging musicians can't find stages; venues don't know where to look for them. The website conceived by SIAE, the Italian authors' and publishers' society, for musicians under 31 brings them together: a concert calendar with a royalty discount for the venues hosting them, track and video uploads, voting and favorites, backend content moderation. I handled the analysis and design of the UX, the high-traffic infrastructure and the physical and logical architecture.

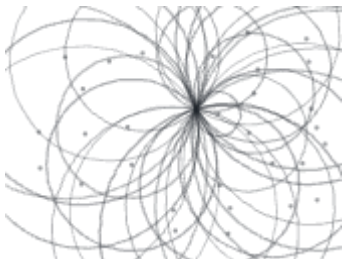


seal · bipartite graph
(10) · seed asef

ASEF culture360

ASIA-EUROPE FOUNDATION, SINGAPORE · 2016 – 2017

Cultural professionals in Asia and Europe work on two continents that know little of each other. culture360 is the portal through which the Asia-Europe Foundation keeps them in touch (culture360.asef.org): news, events, opportunities, a magazine with in-depth features and networking across the ASEM region; since 2011 it has also hosted the website of the Asia-Europe Museum Network. Built in Drupal with highly scalable Docker environments. The assignment in Singapore included workshops with users from different cultural contexts (card sorting and UX interviews) for a universal, inclusive user experience beyond cultural barriers.



seal · a pencil of
circles through a common
point (0+7) · seed
theshukran

theShukran

BEEASIER (CO-FOUNDER) · 2015 – 2016

Engagement on social media rarely becomes concrete help. theShukran tried: a social network animated by young people of many nationalities, many of them second-generation Europeans, where through EthicNow users award the "golden shukran", a monetary donation, to the humanitarian programs in competition. iOS and Android apps in Node.js on AWS with auto scaling; as co-founder I handled the analysis and design of the UX, the high-traffic infrastructure and the physical and logical architecture.



Generative and wearable projects

Generative logos with Attilio Baghino · 2023

Visual identities generated by script and code, collected in the publication *Some Generative Logos with Script and Code* (eb8k, ISBN 9788894742923): Romagna Terra del Buon Vivere, Luiss Data Lab, Nora, Deweave.

Tantangram interactive musical game

An exploration of musical composition for children inspired by the tangram: each geometric piece has a unique melody and every combination produces a harmonious one, regardless of order: a self-directed learning environment that requires no traditional musical notation.

Batticuore 2014 – 2015

A wearable bracelet for newlyweds that tracks position, movement and heartbeat during the wedding, with real-time generative graphics.

IN BRIEF

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Other work

C.U.S. Cagliari 2017 – 2018

A platform for managing sports fields: bookings with payments, membership integrated with the university's student database, discounts by membership type, a management console for the secretariat.

International Sol-Gel Society 2014

A revamp of content architecture, graphics and logo with a migration from Joomla to WordPress; applications to open calls and workshops, board elections, subscriptions with premium content, a newsletter with a visual builder.

Riotta.it

A daily news board for Gianni Riotta, live-connected to his Twitter account; high-traffic infrastructure with caching, redundancy and web sockets.

#ArtArtusi hackathon

Mentor and organizer of the hackathon by Casa Artusi, Fondazione Cassa dei Risparmi di Forlì and Catchy on Italian culinary traditions; creation and management of the event's web platform.

Fontane di Sardegna · SamugheoStory 2019

Territory-discovery apps: itineraries through Sardinia's water architectures and a guide to the Samugheo area.

Analyses and assessments

Vodafone: AS-IS/TO-BE analysis of online SIM fulfillment to streamline deliveries and costs;
Mediaset: assessment of migrating video-metadata streaming from on-premises to AWS
Kinesis (several GB/s); Jakala: a secure VPN remote-access solution for Linux clients.

Websites

weddingsardinia.com · gaymedwed.com · frinaeventi.com · nicolafilia.com



Selected publications

1. *Some Generative Logos with Script and Code*, eb8k, 2023 (with A. Baghino). ISBN 9788894742923.
2. *Consultancy for design and PoC of a platform for monitoring live indicators to measure EOSC readiness*, Zenodo, 2021. DOI 10.5281/zenodo.5595779.
3. *How China unleashed Twitter bots to spread COVID-19 propaganda in Italy*, LUISS / Formiche, 2020.

STUDIES



Education

- **Degree program in Computer Science**, University of Cagliari, 2009–2011.
- **Degree program in Economics, Marketing track**, University of Cagliari, 2005–2007.

andrea@montal.do

every seal is drawn from its seed