

Portfolio

Archaeology | Scientific Illustration | Web Development

Jona Schlegel

archaeolNK





Hello! I'm *Jona*.

Archaeologist, Illustrator, Web Developer
based in Vienna, Austria

I am a landscape archaeologist and scientific illustrator, combining my skills in fieldwork, geophysical prospection, and web development.

My focus is on creating accessible archaeological content through technical illustrations, digital reconstructions, and interactive web platforms. Thereby ensuring good science and scientific communication.

About me

Recent experience and education



website portfolio
available at
jonaschlegel.com



Landscape Archaeology at University of
Applied Science, Berlin

Master of Science · 2016–2018



Field Archaeology/Conservation and
Restoration at University of Applied
Science Berlin

Bachelor of Arts · 2012–2016



Freelancer at archaeolNK

Combining archaeological data with digital tools for public engagement. Projects include illustrations, web platforms, and interactive databases aimed at making complex archaeological data accessible to a broad audience.

Since 2023



Researcher at Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology

Focus: Geophysical surveys (GPR, geomagnetic), database creation (OpenAtlas, CIDOC CRM), and publication of research findings. Notable projects include INDIGO (modern graffiti documentation), Tieschen (Bronze Age settlement), and Müstair (geophysical prospection around the Abbey of Müstair).

2018–2023

About me

Skills

Programming & Web Development – These skills help create and maintain websites, databases, and interactive platforms that enhance archaeological research, communication, and public engagement.

Languages & Frameworks



HTML



CSS



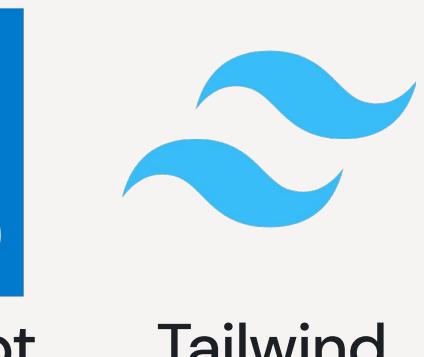
JavaScript



Next.js

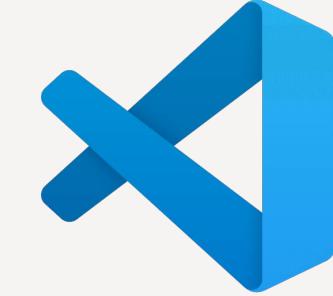


TypeScript

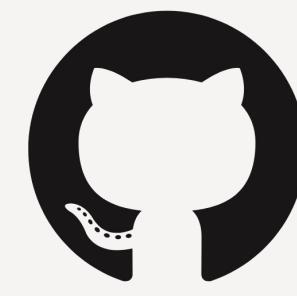


Tailwind

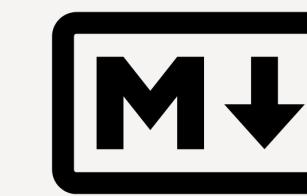
Tools



VS Code



GitHub



markdown

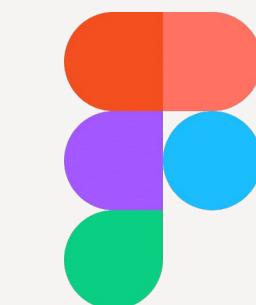
Scientific Communication & Visualisation (Design & Illustration) – These tools are essential for visualising archaeological research, communicating findings effectively, and illustrating both technical and interpretative work.



Inkscape



Procreate



figma



miro

Spatial Analysis & Mapping (Geospatial Skills) – These skills support archaeological research through mapping, spatial analysis, and visualising complex site data.



ArcGIS



QGIS

SERVICE

WEB DEVELOPMENT

Developing interactive websites to present and visualise
archaeological data and projects online



The challenge

Managing and presenting large datasets requires a system that is intuitive and easy to navigate, ensuring that information is accessible to a wide audience. The challenge is creating websites and platforms that provide in-depth, interactive experiences.

Specific goals

Build interactive, user-friendly platforms that support in-depth exploration of archaeological data, which also can incorporate a storytelling approach.

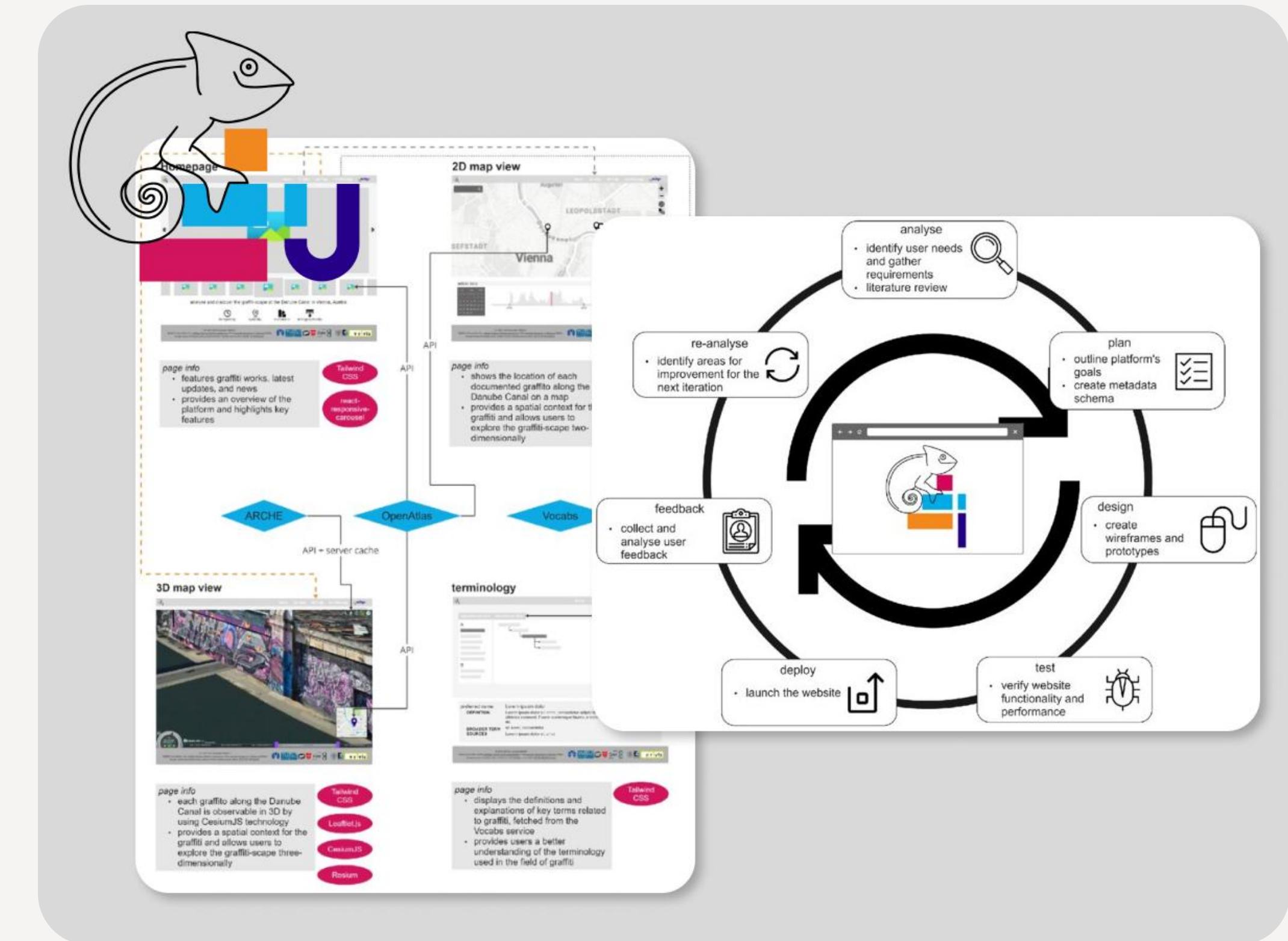
Key services

- **Web Design:** Crafting responsive and visually appealing websites tailored to user experience.
- **Web Development:** Building robust platforms with a focus on functionality, accessibility, and performance.
- **Storytelling:** Integrating narrative-driven content to create engaging, context-rich user experiences.
- **3D Data Visualisation:** Integrating 3D models and interactive maps for dynamic exploration.



Urban Chameleon

The primary objective of Urban Chameleon was to create an intuitive, interactive platform that enables users to explore and analyse graffiti in their spatial and temporal context. This project aimed to preserve graffiti as cultural heritage, making it accessible to researchers, graffitists, and the general public.



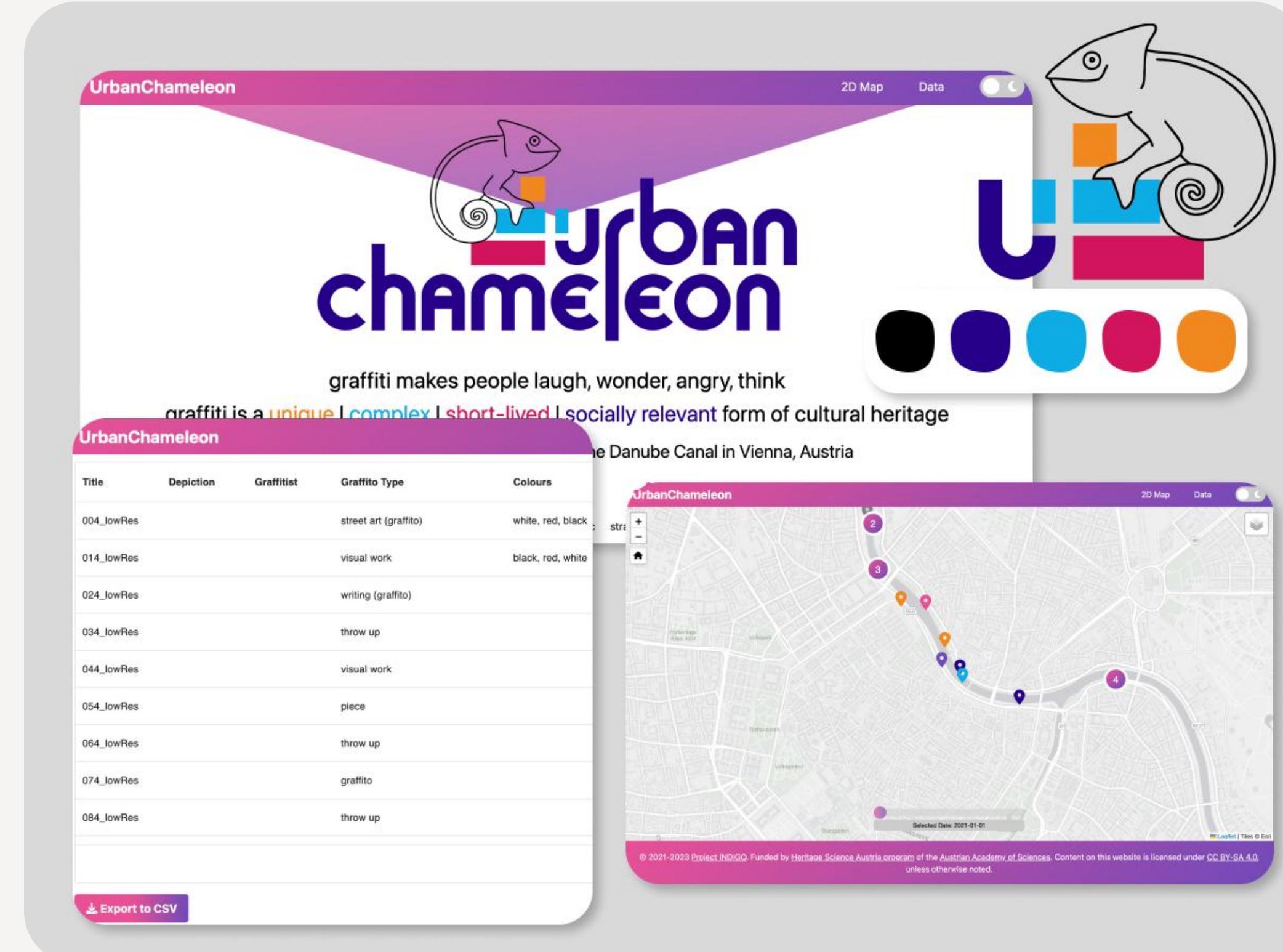
Challenges

The project faced significant challenges, including:

- **Ephemerality of Graffiti:** Graffiti are inherently transient, often removed or altered shortly after creation. Capturing and preserving this short-lived cultural heritage requires a platform which could dynamically display the ever-changing graffiti-scape over time.
- **Performance:** Managing and visualising large datasets in real-time while ensuring smooth interaction on various devices presented a technical challenge, especially with the high-resolution 3D surface models and data layers.

Target Group & Pain Points

- **Researchers:** Need a tool to efficiently query graffiti metadata, including details on location, temporal changes, and creator information, without overwhelming the system.
- **Graffitists:** Require a platform that represented their work and intentions, preserving the ephemeral nature of their art while allowing for virtual engagement.
- **General Public:** Required a visually engaging and intuitive platform that allows them to explore graffiti along the Danube Canal without technical complexities.



Institute

Ludwig Boltzmann Institute for Archaeological Prospection and Virtual Archaeology (Geert Verhoeven)

Role

Wireframing, Mockup, Prototyping, Web Development

Length

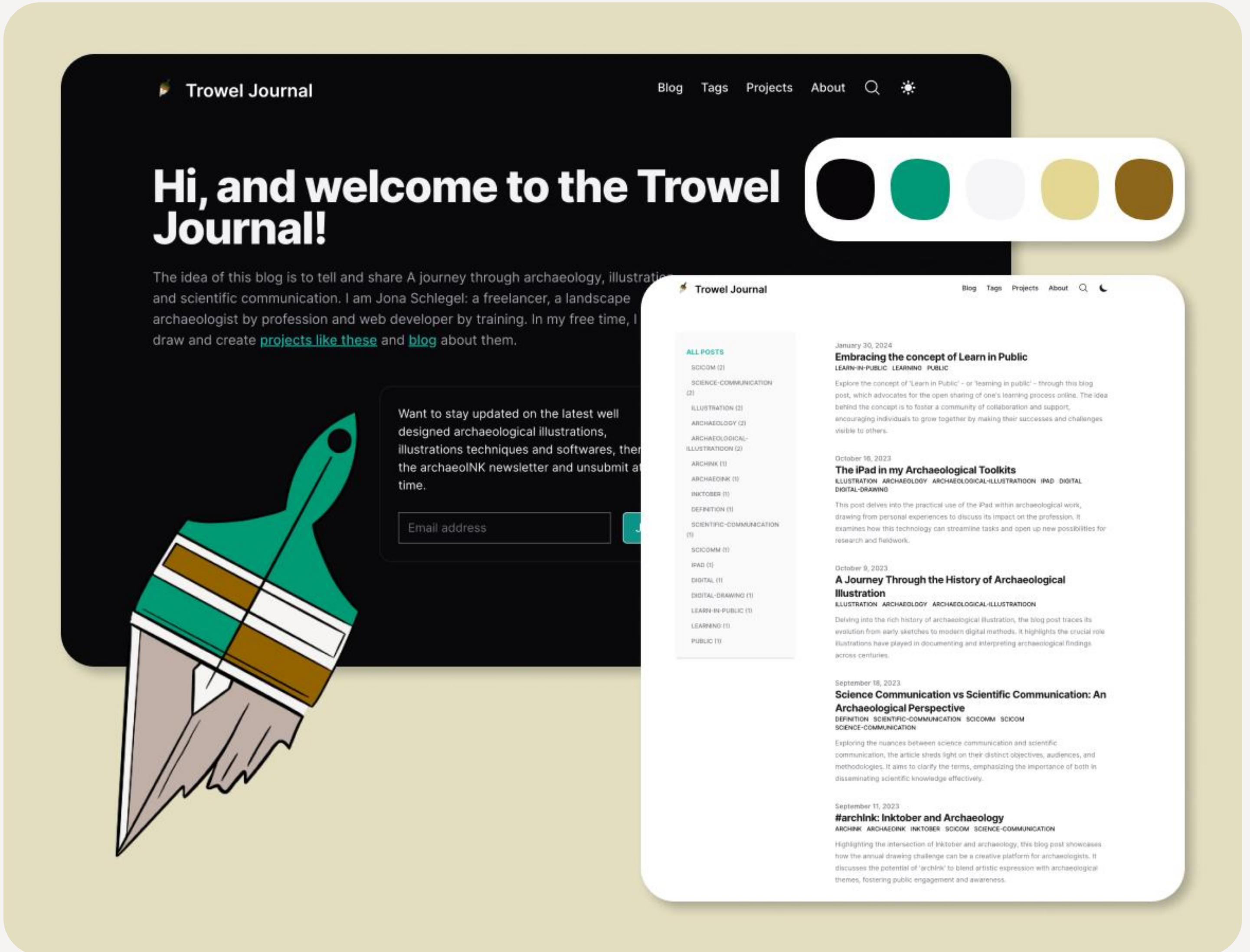
2 month intensive work

Tools

Next.js 13+, React, SCSS, TypeScript, Figma, Miro, OpenAtlas, Resium/CesiumJS

Year

2023



Trowel Journal – Blog

Trowel Journal is a **personal blog** aimed at sharing ideas and **thoughts on archaeology, illustration, and scientific communication**. The blog is structured using Markdown files for each post, allowing for seamless content creation and organisation. The platform enables to discuss ongoing projects, explore new ideas, and share personal insights related to the field of archaeology. Trowel Journal started in October 2023 and is an **ongoing project**.

Challenges

- **Balancing Professionalism with Personal Expression:** Maintaining a tone that resonates with both professional archaeologists and general readers, while sharing personal reflections on scientific topics.
- **Content Management:** Ensuring that the Markdown-based structure remains scalable and easy to manage as the volume of content grew. Markdown was chosen for its simplicity.
- **Consistency in Updates:** The blog aims to regularly publish new content, but maintaining a consistent posting schedule while balancing other professional projects poses an ongoing challenge, which might not be often met.

Target Group & Pain Points

- **Archaeologists:** Seeking accessible content on excavation techniques, digital tools, and workflows, without overly technical language and even incorporating glossaries
- **Illustrators:** Looking for practical tips and insights on scientific, archaeological illustration, particularly how these techniques apply to archaeological projects, while addressing the lack of specialised content.
- **Science Communicators:** Needing approachable methods for communicating complex topics in science and archaeology.

My focus is on enabling archaeologists to communicate their research more effectively, using visual tools to support better science and broader public engagement.

I enjoy exploring the diverse methods and technologies we use in archaeology and sharing that knowledge in a clear and accessible way.

I am always looking to collaborate on scientific projects, either as an illustrator or a web designer/developer, with a particular interest in research related to science communication. I'm also keen to explore 3D web development, integrating maps and 3D artefacts to make archaeology more interactive and explorable. Adding a storytelling aspect to these tools is important to me, ensuring that they serve both the public and other researchers.

— Jona Schlegel —



Thank you
Get in touch:

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