TECHNICAL CV / RESEARCH-CREATION / 2026

CHAÏMAA BOUSTANE

Software Engineer · Data & NLP · Project Coordination · Research-Creation

A software engineer and co-creator of P7, I work at the intersection of software development, data analysis and natural language processing. Trained in physics and chemistry, I came to code through a lasting interest in quantum physics and computer science. My career combines web development, project coordination, communication and data collection, across a drone and robotics hub, digital agencies, the events sector and intersectional collectives.

Marrakech / Morocco / France

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01 / RESEARCH-CREATION

P7 Research — Co-creator and technology lead · 2025–present · France / Morocco

Transdisciplinary research-creation programme founded by artist Magali Giraudy-Heudebert. Co-creation of its multidisciplinary dimension and leadership of its computational strand: data engineering, natural language processing and methodological validation.

RESEARCH OBJECT AND QUESTION

The computational strand explores how the emotions carried by a text, an image or their combination can be described, structured and compared through data, without reducing the artwork to a score. It treats the structured readings produced for each series of artworks as a corpus for analysis.

Central question: “How can a nuanced, non-polar emotional vocabulary be built from human readings of artworks?”

DATA PIPELINE AND DOCUMENTATION

Design of the computational A–G pipeline. Each series’ structured questionnaire is converted into a single, lossless JSON file, then flattened from parts to questions to answers, cleaned and normalised into an analytical dataset, with consistency controls across series.

Series processed include V8 “Le mariage de raison” and V15 “Morte vivante”. Each run is documented in a written protocol and exported as analytical tables and feature matrices, ready for modelling.

NLP AND EMOTION MODELLING

Construction of a non-polar emotion lexicon that moves beyond positive and negative, intended to inform spatial and sensory experiences beyond the text.

Multi-layer analysis combining sentiment classification (multilingual BERT), detection of 27 emotion categories plus neutral (GoEmotions, RoBERTa), valence-arousal-dominance estimates, semantic embeddings and clustering (Sentence-Transformers, k-means), TF-IDF n-grams, readability indices, syntactic markers (spaCy: passive voice, pronouns, modal verbs), co-occurrence graphs and centrality, and transformer attention.

These signals are merged into composite indices and hybrid feature matrices that prepare neural-network modelling and model fine-tuning.

JOINT RESEARCH AND INTERDISCIPLINARY PERSPECTIVES

Comparison of analytical tools and methodological validation, in dialogue with the artistic A–H protocol led by Magali Giraudy-Heudebert, while keeping the two approaches distinct. Cross-modal analysis of text and image, and technical contribution to immersive specifications and prototyping.

Fields of interest: affective computing, cognitive science, the perception and interpretation of artworks, and the meeting points between science, technology and creation.

02 / PROFESSIONAL EXPERIENCE

Project coordination, software and web development, communication, information systems and data collection

WESHORE / Project Coordination and Management

Current position · Marrakech

At a digital marketing and communication agency supporting SMEs, start-ups and larger organisations in France and internationally with their digital transformation: websites, visibility, acquisition, community management and branding.

Coordination of digital projects from brief to delivery: planning, follow-up of deliverables and liaison between clients and production teams.

FEMINIST AND INTERSECTIONAL COLLECTIVES / Coordination, Communication and Information Systems

Morocco / France / International

Coordination and communication for feminist and intersectional collectives, bringing technology and IT expertise to the way they organise.

Design and management of internal information systems: shared tools, information flows, documentation and digital workspaces.

Part of the core team that led and organised the first feminist festival in Morocco, bringing together a wide range of activities and participants from different cities and countries.

Co-organiser of a cycle of workshops and an experimental residency financed by FRIDA, the Young Feminist Fund, which believed in the collective and in its vision.

INDEPENDENT WEB DEVELOPMENT / WordPress, Shopify and Institutional Websites

2022–present · Morocco / France

Design and delivery of websites and online shops, from specification to launch: theme and plugin development, content management, user experience, SEO and performance optimisation, and ongoing technical support.

Institutional and showcase websites built around each client’s identity and audiences: site structure, content organisation, clean design and multilingual versions. Among them, the website of a Paris-based artist (2022).

ART GALLERIES AND ARTISTS / Communication and Online Visibility

Morocco / France

Collaborations with art galleries and artists to strengthen their communication and their presence on the web.

Showcasing artworks and exhibitions online, building digital spaces that reflect each artist’s universe, and supporting their visibility with audiences and partners.

SATISFACTION SURVEYS AND MARKET RESEARCH / Data Collection and Processing

2024 · Morocco

Data collection for customer-satisfaction and market-research surveys commissioned by banking institutions and communication agencies, among individual (B2C) and business (B2B) respondents.

Data entry, verification and consolidation, contribution to database structuring and quality assurance, in line with survey methodologies and confidentiality rules.

ELAF CONSULT / WordPress Development and Maintenance

2023

Content and media management, customisation of themes and plugins with attention to compatibility with future updates, and rapid resolution of technical issues: display errors, plugin conflicts and loading problems.

WSHMA PRODUCTION / Communications Officer and Webmaster

2022–2023 · Events sector

In charge of communication and the digital side of an events production company. Creation, customisation and maintenance of the company’s websites and CMS-based projects.

Work with event organisers to analyse their needs and build tailored digital strategies, branding and online visibility aligned with each event’s objectives.

UXV CENTER / Project Coordination and Communications

2021–2022 · Marrakech

At Morocco’s first centre and hub dedicated to unmanned vehicles (UxV), drones, robotics and related technologies.

Involvement from the early conception stage: research and analysis of use cases and applications for unmanned vehicles and drones, and production of technical brochures. Communication management for UXV Academy and organisation of the task flow on a Kanban board (Jira).

03 / PROJECTS, APPLICATIONS AND TRANSMISSION

Collective feminist projects and collaborative applications

THE FIRST FEMINIST FESTIVAL IN MOROCCO

Part of the core team that conceived, led and brought to life the first feminist festival in Morocco: a programme of varied activities bringing together people from different cities, backgrounds and countries around feminist and intersectional questions.

My role: co-coordination of the programme and logistics, communication and online visibility, and the digital tools the team relied on to organise, from preparation to the festival itself.

WORKSHOPS AND EXPERIMENTAL RESIDENCY — WITH THE SUPPORT OF FRIDA

FRIDA | The Young Feminist Fund, an international fund supporting young feminist-led groups, believed in the collective and its vision and financed the project: a cycle of workshops and an experimental residency bringing together participants from several countries.

As one of the organisers: shaping the format, planning and logistics, coordination between participants and facilitators, and internal communication throughout the residency.

COLLABORATIVE WEB APPLICATIONS

Applications designed and built in teams, each starting from a concrete need that shaped the solution.

Blood donation platform — Full-stack web application connecting blood donors with recipients, designed to support people living with leukaemia. Collaborative project from conception to build, ALX Software Engineering programme (2023–2024).

Recipe-sharing platform — Collaborative web application for publishing, browsing and sharing recipes.

Jobs and internships platform — Collaborative web application connecting students with job and internship opportunities.

04 / EDUCATION, SKILLS AND TRANSMISSIONS

Scientific training, software engineering and a perspective shaped by art

EDUCATION AND FURTHER LEARNING

ALX Africa, in partnership with Holberton School — Software Engineering Certificate, intensive twelve-month programme (2023–2024).

Higher National Diploma in Software Development (2019–2021).

Faculty of Science and Technology, Marrakech — University studies in the physics and chemistry department (2015–2018).

Lycée Hassan II — Baccalaureate in Physical Sciences (2014).

DIGITAL TOOLS AND PRACTICES

Python · C · JavaScript (ES6) · React · Vue.js · Next.js · Flask · Laravel · HTML5 · CSS · Bootstrap · SQL (MySQL, SQL Server) · MongoDB · Git · Linux / Bash.

NLP and data: pandas · NumPy · scikit-learn · spaCy · Hugging Face Transformers · Sentence-Transformers · PyTorch · NetworkX · Google Colab.

Web, CMS and design: WordPress · Shopify · SEO · Figma · Canva. Methods: Agile, Kanban (Jira, Trello), DevOps fundamentals.

LANGUAGES

French · English · Arabic.

DEVELOPING A PERSPECTIVE — BETWEEN SCIENCE AND ART

“From my father, I learned that a letter can be looked at as much as read.”

Born in Casablanca and raised in Marrakech, I grew up in a home where art was part of everyday life. My father, Mohamed Boustane, is a self-taught calligrapher and visual artist. In 1991 he left his job to devote himself entirely to Arabic calligraphy, which he has never stopped reinventing, and his work has since been exhibited in Morocco and abroad. Watching him work, I understood that a discipline can be learned through patience, curiosity and attention to detail, without a path drawn in advance.

My own path has never been purely rational. Curious about how things work, I found room to explore on my own, from my bedroom, discovering software, how programs are built and the online communities that share that knowledge. University studies in physics and chemistry gave me rigour and a taste for reasoning; my fascination with quantum physics and computer science, two fields that question how information is described and processed, then led me to code.

Alongside, I have always been nourished by music, images, human interactions and the small details that change the way something is felt. This openness to art and to crossing disciplines is what led me to take on P7. In the project, my technical work starts from a sensitive question, how an artwork reaches the people who look at it, and tries to give it tools without ever flattening it. Where my father looks into letters, I look into language: two ways of searching for what lies beneath the sign.