

Welcome

Master of Science in Digital Humanities & Minor in Digital Humanities, Media & Society

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DH Section Director

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Artificial Intelligence Culture or Technology?



Music

Culture or Technology?



Video Games Culture or Technology?



Museums

Culture or Technology?



Social Networks

Culture or Technology?



The EPFL DH Master in a nutshell

Unique MS program in the field
offered in an engineering school

Attracts students with STEM
bachelor's degrees and interests in
media, culture, society, humanities

Started Fall 2017



Highlights

Interdisciplinarity

- Courses at interface of computing and other disciplines: design, museography, history, media studies, music
- Students exposed to tools and methods that go beyond a standard engineering curricula
- Critical paper reading, essay writing, ethical protocols

Project-Based Learning

- 7 out of 8 mandatory courses involve team projects
- Maximize project ownership and peer interaction
- Approached with research-minded methodology

Internships and PDMs

- Creative and cultural industries
- Humanitarian and public sector

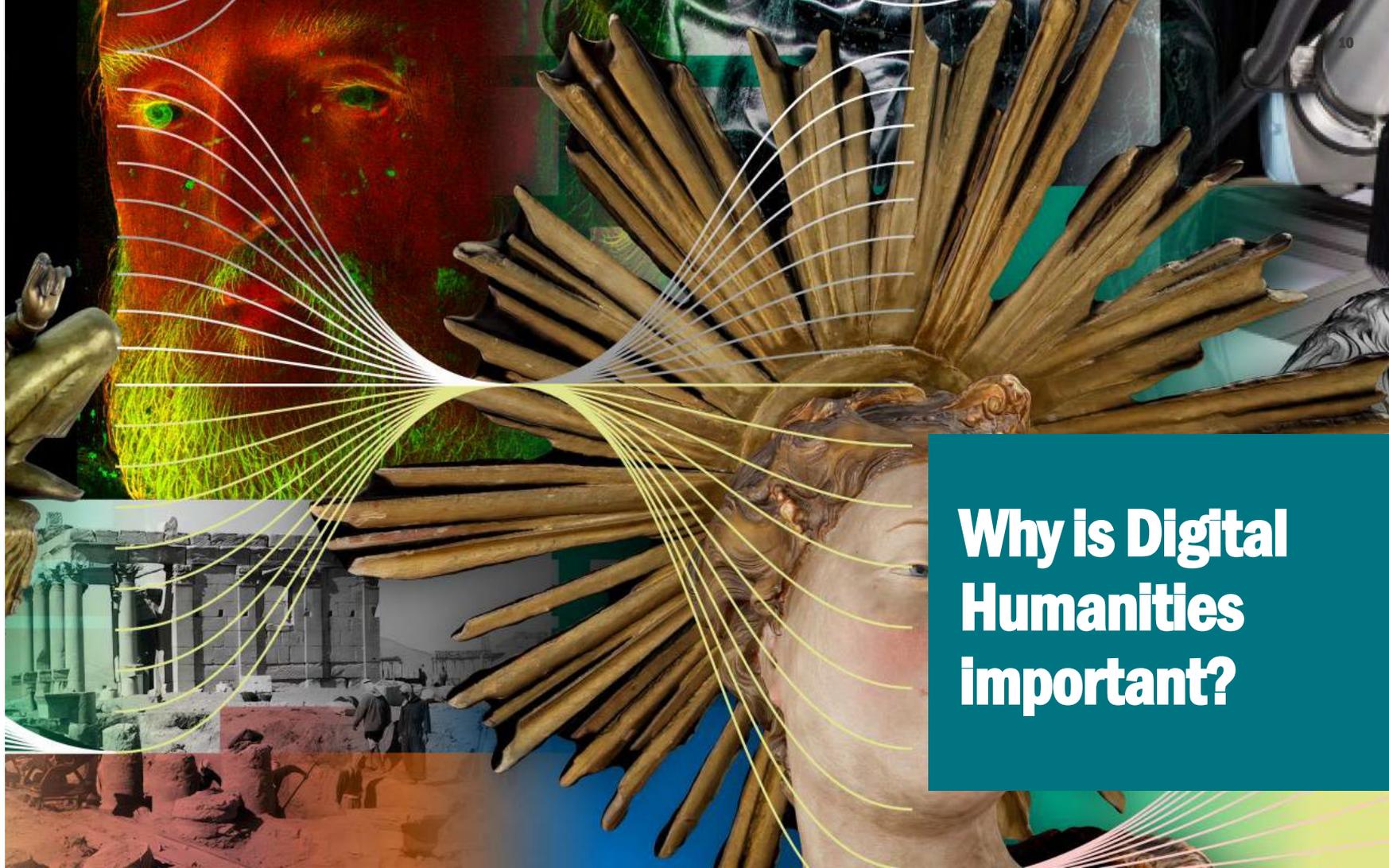
Gender balance

2024/25 – 47% women

2023/24 – 67% women

2022/23 – 64% women



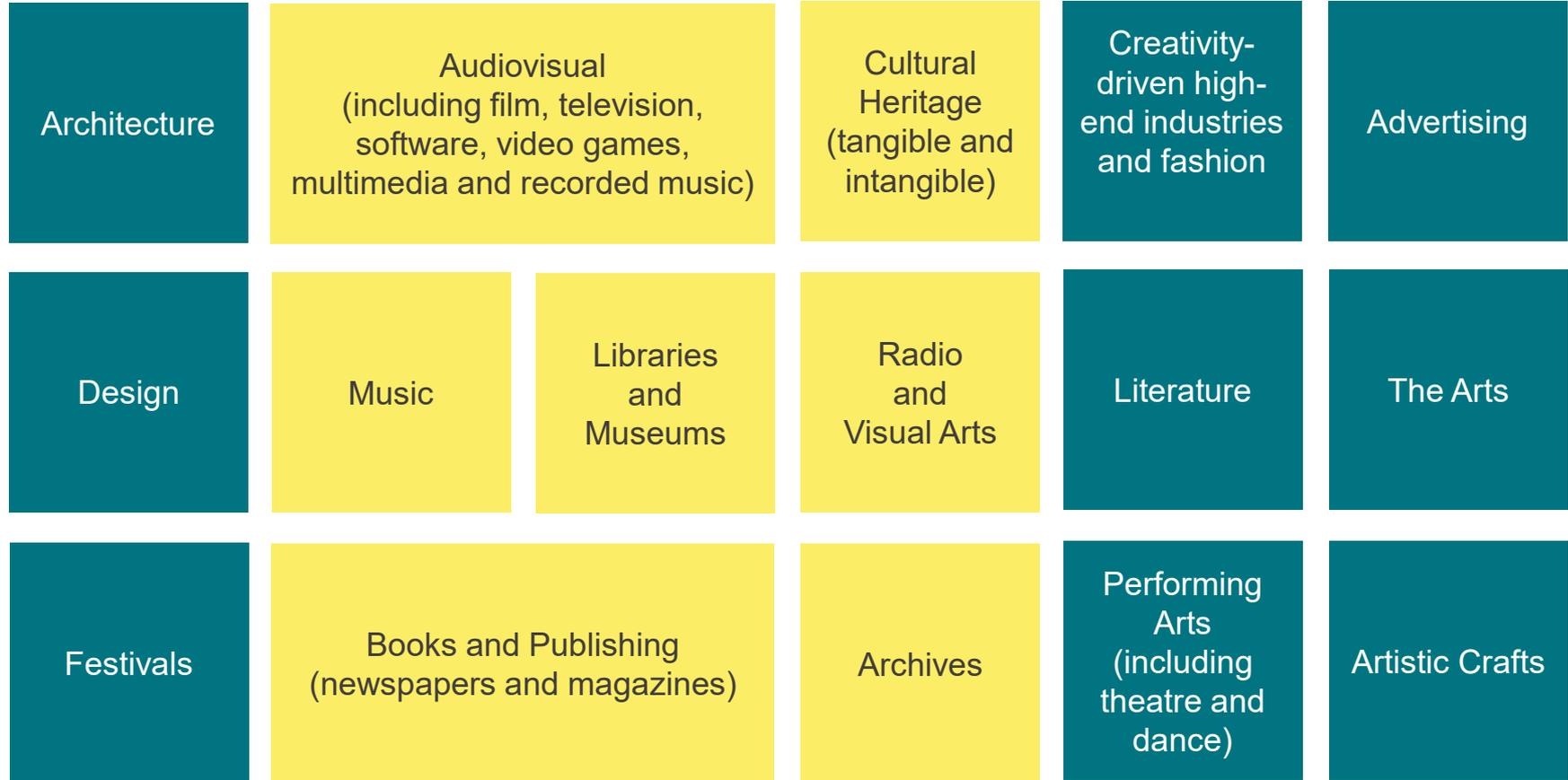


Why is Digital Humanities important?



- **Cultural and Creative Sectors and Industries (CCSI)**
- Cultural and creative studies in European universities are mostly focused on the ‘creative part’
- **Graduates** are not always ready to enter the modern labour market as they **lack cross-sectoral** (entrepreneurial, **digital** and financial management) **skills**.
- **These skills are needed for innovation** in both emerging sub-sectors and very mature ones that undergo a profound digital transformation.

The CCSI includes...



Our graduates meet these needs: Industry, PhD, teaching



DH Alumni

First DH Alumni event in 2023



4:04 minutes

DH Alumni

What are they doing now?



"I really liked the Cultural Data Sculpting class by Prof. Kenderdine at the Laboratory of Experimental Museology, and now I'm doing my PhD there."

– Giacomo Alllata, PhD Student – EPFL



"I work in a mapping company. I analyze the data and look into how people actually behave in organizations, what are their roles and how they distribute work amongst each other."

– Robin Szymczak, Data Scientist – Peerdom



"I'm mainly doing work related to front end development in this Lausanne based startup."

– Yuanhui Lin, Web developer – quanthome SA



"I build machine learning models to create value for the company in the logistic process."

– Hakim Invernizzi, Data Scientist – Digitec Galaxus



"I am doing my PhD at the Digital Visual Studies Lab researching computer vision methods and links to AI, to art and art history."

– Ludovica Schaerf, PhD Student – University of Zurich / Max Planck Institute

DH Alumni testimonies



I am the **Head of Data** in a music industry start-up in Paris (it's called Groover).

I am running a team of Data Scientists and Engineers to **create Machine Learning applications** such as a recommendation system matching artists and music industry professionals or an audio tagging tool to help artists understand the genres and trends they are operating in.

My day-to-day consists of staying up to date with **ML research** through paper presentations and prototypes, setting and maintaining **production infrastructure** for our current models, **creating analytics** for everyone in the company and provide external data to take **strategic decisions** with respect to the company's competition.



I am an **Information Management and Data Science Officer** at the Federation of the Red Cross and Red Crescent Societies.

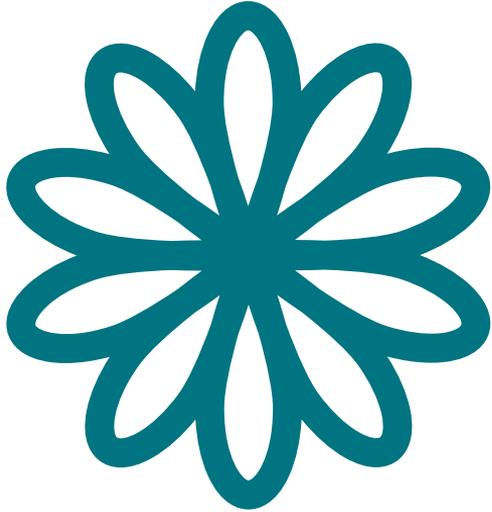
The Red Cross and Red Crescent Movement is recognised for responding to disasters around the globe, and their Information Management teams are the ones in charge of **providing data insights to operational teams** in shape of maps, dashboards, analysis and platforms.

In my current role, I support with **data science projects** aimed to improve the effectivity of our operations. This goes from **technical developments** to strategic alliances, from **processing big data** and proposing **machine learning models**, passing through the design and management of platforms for early warning, to university-industry partnership management.

Being a data scientist at the Red Cross and Red Crescent Movement has been an honour, and although it was a quite unique opportunity at the time, I think now **opportunities are only growing**, searching for profiles that besides being technically capable are **informed and interested on the social implications of their solutions** - and I think digital humanities engineers are in a good starting position to offer that.

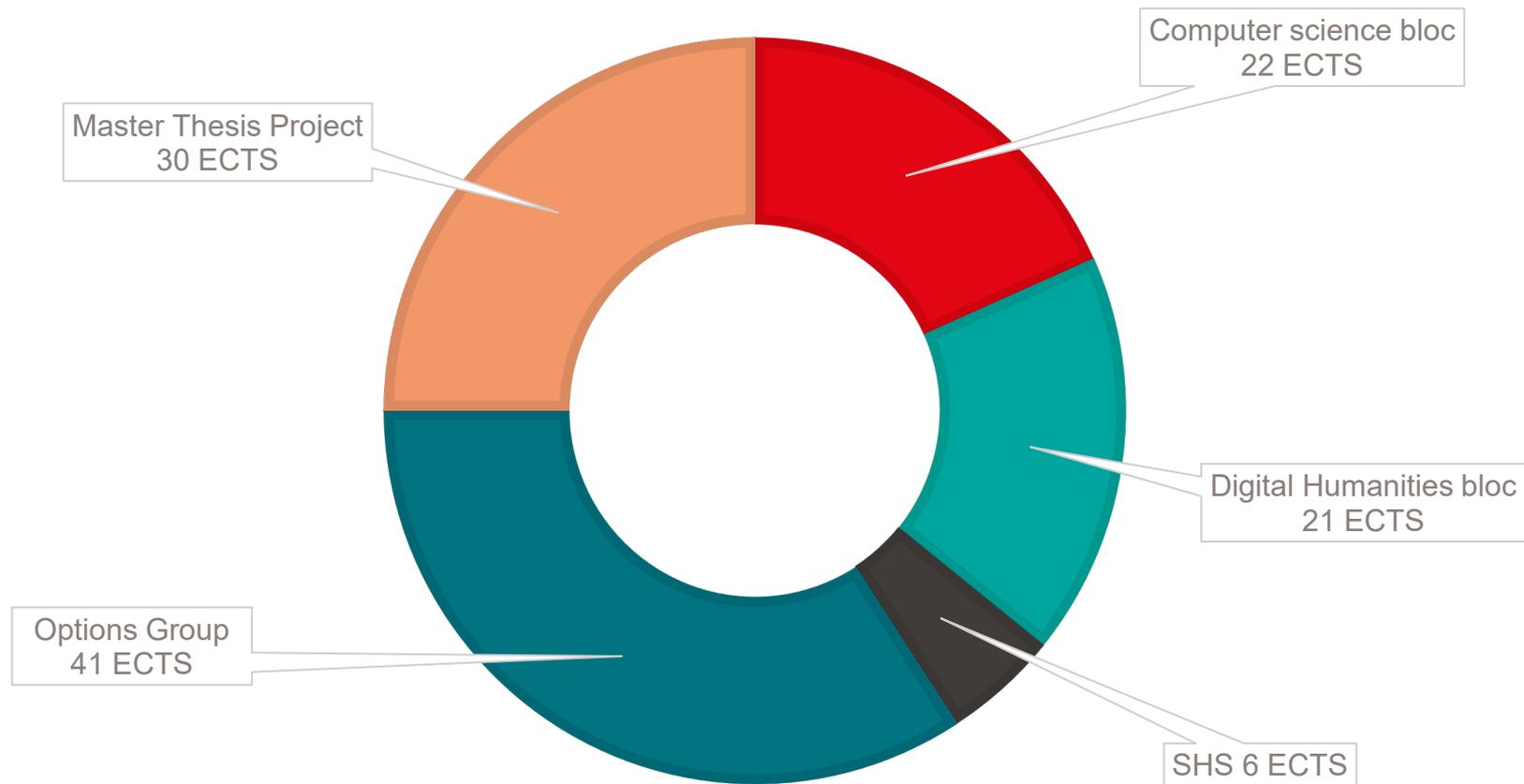


The EPFL DH Master in details



New as of this year

No more 4.5 average on your Bachelor to be able to access a Specialized Master's



Allows for maximum flexibility

- Unique offer of core, project-based courses
- Students can choose optional courses out of a large list of classes from many other sections
- Students can choose to do a semester project in the options group
- Credits can be taken outside of the study plan, for example classes at UNIL (maximum 15 ECTS).
- The mandatory internship can be done:
 - Short 8-week summer internship
 - One semester internship (4 to 6 months)
 - Master thesis project done in industry or in an institution

Core courses and faculty

Computer Science Block



Daniel Gatica-Perez
Computational
Social Media



Frédéric Kaplan
Foundations of
Digital
Humanities



Mathieu Salzmann
Machine
Learning for DH



Bob West
Applied Data
Analysis

Digital Humanities Block



Jérôme Baudry
History and the
Digital



Nicolas Henchoz
Design research
for digital
innovation



Sarah Kenderdine
Cultural Data
Sculpting



Martin Rohrmeier
Digital
Musicology

Optionnal DH classes



David Javet
Game Design &
Prototyping



Johan Rochel
Ethics and law of
AI

In industry or media/cultural institutions - 3 options :

- 8-week internship over the summer
- One semester (4 to 6 months)
- Master thesis project

Internships can take place in many different industries in Switzerland and abroad :

- Media & cultural institutions
- Industry
- Humanitarian organizations

Examples in Media & Cultural Institutions

Switzerland

- RTS – Radio Television Suisse, Lausanne
- Art Recognition AG (evaluation of art authenticity), Zurich
- Peter Lang Group AG (publishing company), Bern
- EBU – European Broadcasting Union, Geneva
- CERN, Geneva
- Archives de l'Etat du Valais, Sion
- Largo Films SA (startup in the film industry), Lausanne
- Musée d'Art et d'Histoire de Genève

Europe

- Agence Mediafaune, (Digital Communication), France
- Fondazione Giorgio Cini, Italy
- Centre Allemand d'Histoire de l'Art, France
- BnF - Bibliothèque Nationale de France, France
- INHA - Institut national d'histoire de l'art, France
- Bibliotheca Hertziana – Max Planck Institute for Art History, Italy

World

- Dunhuang Academy, China
 - Harvard Library, USA
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Examples in Industry

Switzerland

- ABB, Baden
- Yang Technology AG (Oppo), Zurich
- AXA insurance, Lausanne
- Philip Morris International, Lausanne
- Oracle, Zurich
- Visium Technologies (ML & AI), Lausanne
- Maxon Intl, Sachseln
- Logitech, Lausanne
- Nestlé, Orbe

Europe

- DataGalaxy (NLP & UX), France
- Deepki (ESG company), France
- Allegro (on-line e-commerce platform), Poland

World

- Alibaba Cloud, China
- Tencent AI Lab, China
- MiHoYo (game industry), China

Examples in Financial institutions

Switzerland

- Pictet Asset Management (private banking), Geneva
- BNS – Banque Nationale Suisse, Zurich
- MET AG (Trading Company), Zug

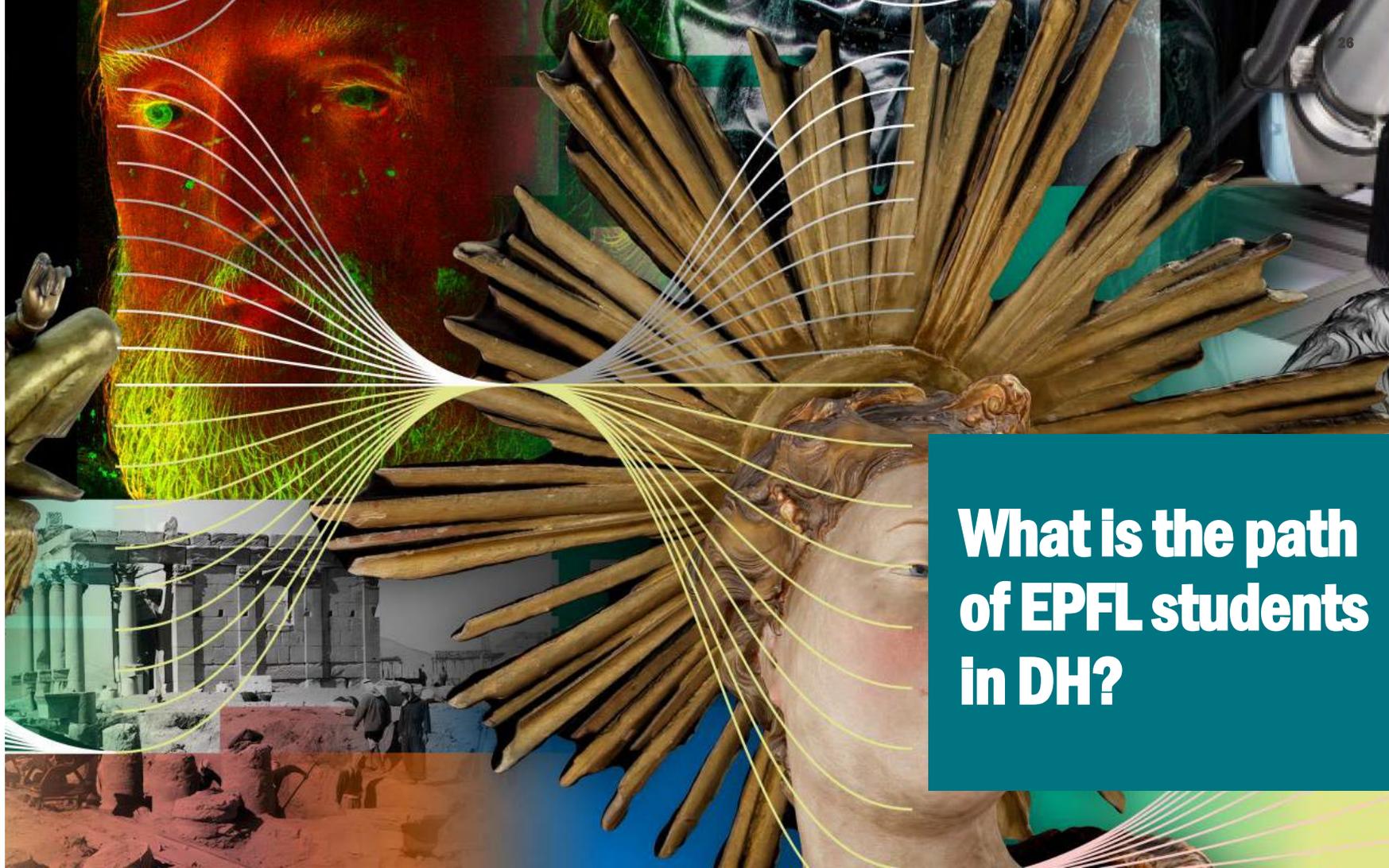
Examples in Humanitarian Organizations

Switzerland

- Int. Federation Red Cross (IFRC), Geneva

Recent examples

Student name	Graduation year	Publication type	Publication title	Author list	Publication details
Yuanhui Lin	2022	Journal	Characterizing Swiss Alpine Lakes: from Wikipedia to Citizen Science	Y. Lin and D. Gatica-Perez	ACM Journal on Computing and Sustainable Societies, Vol. 1, No. 2, Dec. 2023
Haeun Kim	2022	Conference	Referencing in YouTube Knowledge Communication Videos	H. Kim and D. Gatica-Perez	ACM International Conference on Interactive Media Experiences (IMX), Nantes, Jun. 2023.
Aurel Maeder	2023	Conference	Learning about Social Context from Smartphone Data: Generalization Across Countries and Daily Life Moments	A. Maeder, L. Meegahapola, and D. Gatica-Perez	ACM Conference on Human Factors in Computing Systems (CHI), Honolulu, May 2024
Elisa Michelet	2023	Journal	An Industrial West? A Mixed-Methods Analysis of Newspapers Discourses about Technology over One Hundred and Ten Years (1830-1940)	Denove Emmanuelle, Michelet Elisa, Savcisens Germans, Fernandez Fernandez Elena	Journal of Data Mining & Digital Humanities, jdmhd:11741, 19 August 2024
Hannah Casey	2024	Book chapter	Mapping Techniques for an Automated Library Classification: The Case Study of Library Loans at Bibliotheca Hertziana	Hannah Laureen Casey, Alessandro Adamou, Dario Rodighiero	Linking Theory and Practice of Digital Libraries, 28th International Conference on Theory and Practice of Digital Libraries, TPDL 2024, Ljubljana, Slovenia, September 24–27, 2024, Proceedings, Part I, pp.127-143



**What is the path
of EPFL students
in DH?**

Bachelor

- Computer Science

Internship

- Institut national d'histoire de l'art,
France

Domain of work today

- Archiving and records
management consulting services

Some examples

Bachelor

- Life Sciences



Internship

- BnF - Bibliothèque Nationale de France



Domain of work today

- PhD student at EPFL

Bachelor

- Technology Management
- 

Internship

- International Federation of Red Cross and Red Crescent Societies (IFRC), Switzerland
- 

Domain of work today

- IFRC - Data Analyst in the humanitarian sector
- 

Some examples

Bachelor

- Computer Science + Digital Media
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Internship

- Fondazione Giorgio Cini, Italy
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Domain of work today

- PhD student outside EPFL
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Some examples

Bachelor

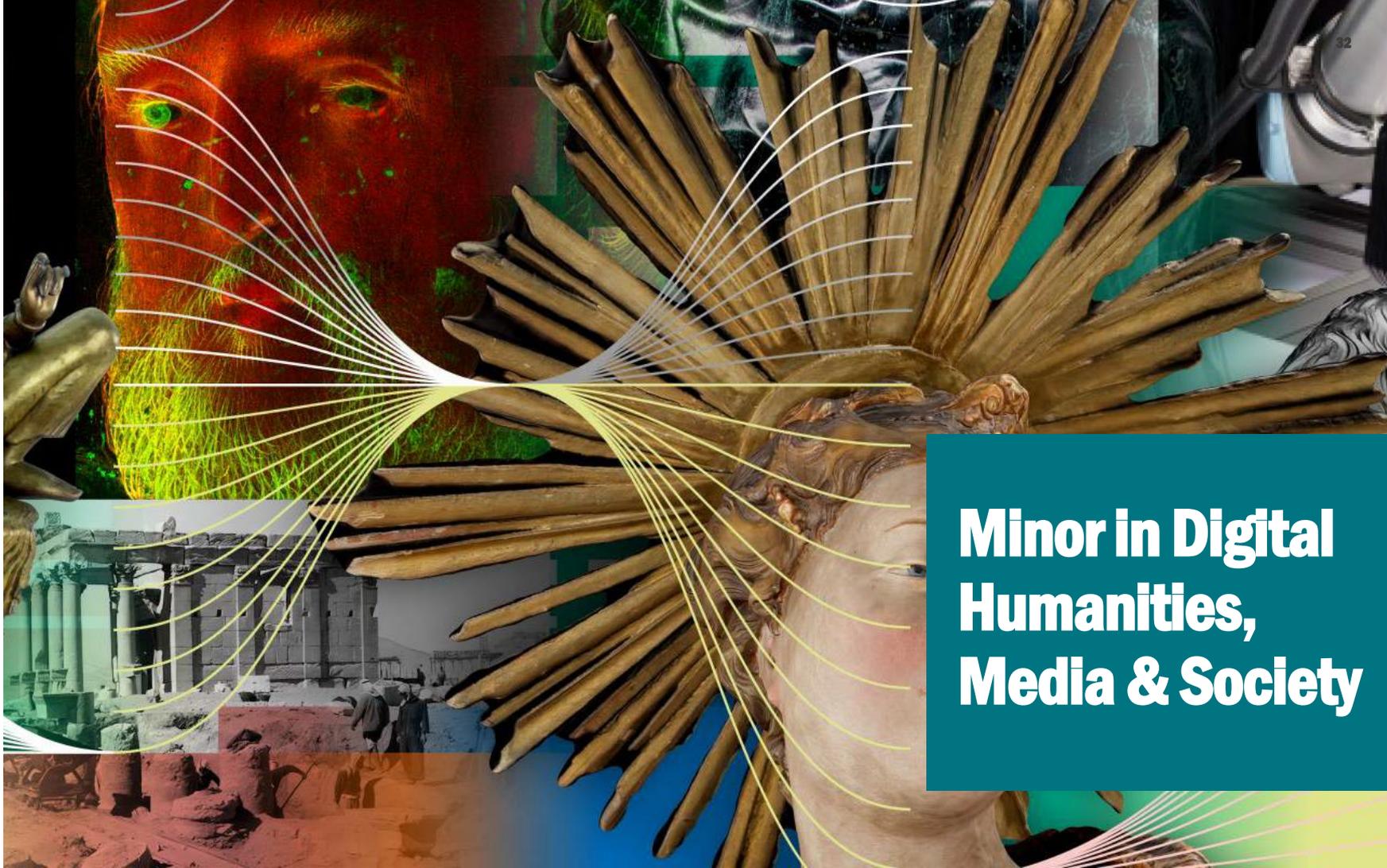
- Economics major & informatics minor
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Internship

- BNS – Banque Nationale de Suisse
- 

Domain of work today

- BNS – Banque Nationale de Suisse
- 



Minor in Digital Humanities, Media & Society

What is a Minor?

A way of supplementing the knowledge acquired in a Master with knowledge from another subject area

- A Minor is equivalent to 30 credits that must be earned during the duration of the master's program.
- These credits are taken in courses offered by another section.
- The 30 credits count toward the 120 credits of the Master's degree and replace 30 credits in your optional courses.
- The Minor is mentioned in the Diploma Supplement.

What is the difference between the Master and the Minor?

Master

- Allows you to delve deeper into the subjects
- You can do research in the field (semester project and master thesis project)
- Interdisciplinary field appreciated by many employers

Minor

- Allows you to continue in your current field of studies
- You can take all the DH classes if you wish
- Receive a diploma supplement that shows you have studied in 2 fields

What will I learn in the Minor in Digital Humanities, Media & Society ?

- Theory and techniques to understand and work with media, heritage, and culture.
- Principles and techniques to design and build systems for – and interacting with – people.

The link to people is a key factor of this minor, i.e., to understand how people produce data, what happens to human-generated data processed with algorithms and what to do about it, like detecting possible biases, etc.

What are the career prospects?

The goal of the minor is to open doors to creative and cultural industries including the media industry. For example, students can find employment in **media companies**, in the **gaming industry**, in **museums**, in **public or private archives**, in the **music industry**.

The essential aspect of the human component also opens doors to industries where understanding people and therefore user experience and user interaction are key. This leads to positions in companies as mentioned above, but also in **insurance companies**, **banks**, **on-line commerce**, **NGOs** and the **humanitarian sector**, **hospitals**, **governmental agencies**, etc.

Minor Study Plan

Minor : Digital humanities, media and society

Computational Social Media

Computers and music

Cultural data sculpting

Data visualization

Design research for digital innovation

Digital education

Digital musicology

Ethics and law of AI

Foundations of digital humanities

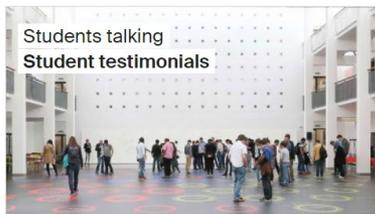
Game design & prototyping

History and the digital

Technology, sustainability and public policy

Virtual reality

For details:
go.epfl.ch/dhminorstudyplan



<https://go.epfl.ch/dhmaster>

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Q&A

