



École
nationale
des
chartes



Call for internship offers for second year students of the master "Digital technologies applied to history"

You are invited to propose an internship for second year students of the master "Digital technologies applied to history" of the Ecole nationale des chartes (PSL University, Paris). Lasting 3 to 4 months and starting in early April 2023, this internship includes the production of a technical deliverable and ends with the defense of a dissertation.

Deadline for sending internship offers: December 8th, 2023 (first session) or January 8th, 2024 (second session)

The "Digital technologies applied to history" master aims to train specialists in data and digital document engineering. Future graduates are expected to work in heritage institutions (archives, libraries, museums), humanities research labs, or private companies in the field of data infrastructure and digital archiving. They may become data engineers or analysts (with skills including data modeling and data processing, digital scientific publishing, data visualization, web publishing, etc.) or digital project leads (with skills including digital project management, process analysis, specifications and specifications...)

Student skills

The first year of the master (M1) provides general knowledge on historical sources and heritage documents, from the Middle Ages to nowadays (archival and legal sources, books and media, methodology for studying and processing sources, digital culture including digital humanities, practice of a foreign language).

The first semester of the second year (M2) includes 6 teaching units (UE):

- UE1: digital document life cycle (digitization and born-digital items harvesting, archiving and preservation, archival standards including EAD, OAIS and SEDA, access and interoperability, APIs including IIIF)
- UE2: digital scientific publishing (TEI, LaTeX, XSLT)
- UE3: data processing (database modeling, semantic web, query languages: SQL, XQuery and SPARQL, data processing, data visualization)
- UE4: IT fundamentals (project management, knowledge of information systems, Linux, introduction to web server management)
- UE5: introduction to programming and web development (HTML, CSS, Javascript, Python including Flask and SQLAlchemy)
- UE6: English lessons applied to IT (IIIF course).

In order to finalize their training, students must complete an internship putting into practice the skills acquired during this first semester.



Membre du campus Condorcet

65, rue de Richelieu
F-75002 Paris
T +33 (0)1 55 42 75 13
etudes@chartes.psl.eu
www.chartes.psl.eu

Internship deliverables

The internship must include the production of a technical deliverable, such as:

- requirements or process analysis for the development of an application or a data processing workflow (e.g. digital archiving, dematerialization, etc.)
- data modeling, data analysis or annotation of datasets or documents in order to prepare them for computing processes or workflows
- processing of a dataset or a corpus with the prospect of its exploitation or its valorization
- prototype of an application, a digital edition, or a data processing workflow.

The internship may include data production (transcription, cataloguing, etc.) if this is necessary to understand the challenges of the project, this activity remaining less than 20% of the time devoted to the internship. At the end of the internship, the student writes a master thesis which aims to provide a problematized vision of the corpus or collection and of the technological context of the mission. The master thesis is defended between mid-September and mid-October. The evaluation of the 2^e semester of M2 covers the internship, the master thesis, the technical deliverable and the defense.

Internship hosting conditions

The student is supervised during his/her internship both by a technical and/or scientific manager in the hosting organization and by a tutor from the Ecole nationale des Chartes who plays the role of technical advisor and director of the master thesis.

Private companies, archives, libraries, research laboratories, etc., are all institutions that can accommodate our students, in France and abroad. The hosting organization provides the student with the resources needed for their mission (office, computer station) and ensures the financial compensation of the internship according to the current legislation.

Students choose their internship between the end of November and the end of January. The internships start at the beginning of April for 3 to 4 months.

Internship proposals should be sent to emmanuelle [point] bermes [at]chartes.psl.eu by completing the form below.

Resources

A few examples of internships that took place in 2021-2022 :

- Archival vocabularies as Linked open data: Creation of authority records from the “dictionary of prefects” for the future National Archives staff repository.
- From ALTO to TEI: modeling of automatic transcriptions for pre-editorialization of texts
- How to gather and promote the “Mazarinades”? Digitization and metadata management for seventeenth-century print collection

- Processing workflow for the digital edition of the handwritten correspondence of Constance de Salm (1767-1845)
- Towards the automatic indexation of the “Trésor des chartes”. Constitution, alignment and use of a named entity vocabulary within the Himanis project.

See also (in French) :

- [complete list of master theses 2021-22](#)
- [presentation of the master](#)
- [List of M1 courses](#)
- [List of M2 first semester courses](#)
- [This call for internships in original version](#)

1/ GENERAL PRESENTATION OF THE INTERNSHIP

Context of the organization: repository and research infrastructure,
Swiss National Data and Service Center for the Humanities (DaSCH)

Presentation of the project: IIIF and IIIF 3D developments (see pages 6-7 for detailed description)

Technical deliverable(s): write an automated pipeline in python to create light-weight
3D models from the original heavy models

Scientific deliverable(s): define mappings for IIIF-manifests for project data

Required skills: good skills in Python, data modeling, SPARQL

2/ CONDITIONS OF THE INTERNSHIP

Accommodation facilities: either student residence (limited availability, we can help with filling
in the form - see page 12!) or private

Place(s) of work: Allschwil, close to Basel and next to the French border

Hours per week: 42 hours

Financial compensation: CHF 2050 per month

Duration of internship: 3 months

Begin date: 01.04.2024

End date: 30.06.2024

Flexibility if relevant:

3/ CONTACT PERSONS

Technical:

Name and surname Rita Gautschi / Ivan Subotic

Job position in relationship with the project director / technical head of DaSCH
Directions (email) rita.gautschi@dasch.swiss / ivan.subotic@dasch.swiss

Scientific:

Name and surname Rita Gautschi

Job position in relationship with the project director of DaSCH

Directions (email) rita.gautschi@dasch.swiss

Comments if relevant:

Name of the person who filled the form (*if different from people above*)

Name and surname

Job position in relationship with the project

Directions (email)

4 / ANY OTHER INFORMATION

Complete as you will

please see the following pages 6-12

Proposition of internship at the Swiss National Data and Service Center for the Humanities (DaSCH)

[DaSCH](#) is a national infrastructure for Humanities' research data with focus on qualitative data in Switzerland, i.e. bitstream data such as images, audio, video, text. DaSCH staff develops and maintains a FAIR data repository for long-term archiving, the [DaSCH Service Platform](#). Our intention is to keep databases alive – data in DaSCH remain directly accessible and searchable for humans and machines. Another distinct feature is that persistent identifiers (ARKs) are provided on the project as well as the single object level: each object within a dataset has its own persistent identifier and thus allows for a precise citation.

DaSCH's technology is based on open-source software. The API supports publishing data as Linked Open Data, using open standards (RDF, RDFS, OWL, IIIF) to allow interoperability between different repositories. The data are stored in an RDF triplestore and accessed via Gravsearch queries (Gravsearch is DaSCH's own query language which is basically a subset of SPARQL).

Concerning IIIF, DaSCH currently provides support for the IIIF Image API 3.0. Bitstream data is stored in the IIIF-compatible media server SIPI. DaSCH's generic frontend uses OpenSeadragon for the display of these data, any annotations are stored within the triplestore. Two further developments in connection with IIIF are currently planned:

1. 3D data is becoming more and more a common part of research projects. The original files are much too heavy to be displayed. Thus, light-weight versions of the original 3D data need to be created which in the future – once a IIIF standard for such data is established – can be viewed and annotated. Currently DaSCH has no 3D-capable viewer implemented. A manual process to create light-weight 3D

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models was successfully established. This has to be automated by using e.g. the blender API and imagemagick.

2. DaSCH wants to deliver IIIF-manifests for all the bitstream data archived within the DaSCH Service Platform. A proof of concept for one test project is ongoing. Since each project has its own data model, it is necessary to define a mapping for each project to create the IIIF-manifest and to write the corresponding Gravsearch/SPARQL queries.

Required skills and knowledge to contribute to the intended IIIF-related developments at DaSCH are: Python, basics of data modeling and the semantic web, SPARQL.

Accommodation facilities / Financial compensation

100% corresponds to 42 hours per week in Switzerland and DaSCH is bound to the salary scheme of the University of Basel. For students from abroad doing an internship at the University of Basel or an institution related to the University of Basel such as DaSCH, the monthly compensation is CHF 2'050 (tariff PRAK-11).

DaSCH is [located](#) in the city of Allschwil, very close to the French border and about 20 minutes away by bus from the main train station in Basel. There are buses commuting to France. Thus, one option would be to be based in St. Louis or Hégenheim. Accommodation in Basel may be possible if the applicant decides early: currently (November 10th, 2023)) a guest room in the basement of the student residence is available. The room has a window, there is good ventilation, but daylight is limited. There is a toilet in the basement; the shower and kitchen are shared on the ground floor. The room is furnished and has good internet. It costs CHF 570 for one month (pro rata

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temporis for shorter stays) plus a deposit (CHF 100 refundable on moving out) and a cleaning fee of CHF 100. Please see the attached photos of the room. It would be necessary to register for the room as soon as possible, it can't be guaranteed that it will be available.





Alle 97 Einzelzimmer sind auf zwei begrünte Innenhöfe ausgerichtet (Erdgeschoss, 1. Stock, 2. Stock)



Studentenzimmer:
Grösse ca 12 m²,
ausgestattet mit Bett,
Matratze, kleinem Bei-
stelltisch, Fenstervor-
hang, Kleiderschrank,
Regal, Tisch, Schreib-
tischstuhl, Wasch-
becken mit Warm- und
Kaltwasser, Kabel-
Internetanschluss,
Deckenlampe, Lampe
und Spiegel über Wasch-
becken. Individuelle
Detailgestaltung möglich
(siehe Beispiele rechts)



Zwei der fünf



Gemeinschaftsküchen



Aufenthaltsraum Erdgeschoss



1 von 24 Nasszonen
(Dusche/WC)



Musikzimmer

Gut zu wissen:
Wir legen grossen Wert
auf Gemeinschaftssinn,
Rücksichtnahme und
Verbindlichkeit. Bitte
melde Dich deshalb nur
bei uns an, wenn Du
bereit bist, Dich kon-
struktiv an den Gemein-
schaftsverpflichtungen
zu beteiligen.



Lernzimmer

In kleineren Gemeinschaften genutzt:
Duschen/WC (mit bis zu vier weiteren
BewohnerInnen). Küchen (komplett ausgerüstet).

Gemeinschaftsräume: Aufenthaltsräume,
Lernzimmer, Musikzimmer, Tischtennis-Raum,
begrünte Innenhöfe mit Lounge und Grill.

Zweckräume: Waschküche, Trockenräume,
Velokeller.

Mietpreis und Konditionen auf Anfrage.

ANMELDUNG Kurzzeit-Mieter

zurücksenden an:

studentenheim-mittlerestrasse@unibas.ch

Foto

Bitte in Blockbuchstaben ausfüllen.

Name _____ Vorname _____ w m
Strasse _____ PLZ, Ort _____
Kanton/Land _____ e-mail-Adresse _____
Telefon _____ Natel (Handy) _____
Heimatort _____ Nationalität _____ Zivilstand _____
Geburtsdatum (T/M/J) _____ Mitteilungen erwünscht in Deutsch Englisch

Name(n), Adresse(n) und Telefonnummer(n) der Eltern: _____

Beruf Vater _____ Beruf Mutter _____

Im Notfall zu benachrichtigen _____

1. Gewünschtes Eintrittsdatum _____
2. Gewünschtes Austrittsdatum _____
3. Studienfach/Praktikum _____
4. An welcher Universität sind Sie seit wann immatrikuliert? _____
5. Für Nicht-Studierende: was für eine Ausbildung absolvieren Sie zur Zeit? _____
6. Bei welcher Firma, welchem Institut sind Sie in Basel tätig? _____
7. Beziehen Sie Stipendien/Studienbeihilfen/Gehalt? _____ 8. Wenn ja, wie viel pro Monat? _____
9. Von welcher Institution? _____
10. Wer bezahlt Ihren Aufenthalt bei uns? _____

Bitte nur in Stichworten beantworten, bei Bedarf Zusatzblatt benützen.

11. Was stellen Sie sich unter der Gemeinschaft im Studentenheim vor? Warum möchten Sie bei uns wohnen? Was erwarten Sie? Und was sind Sie bereit, dazu beizutragen?

12. Wie sind Sie auf uns aufmerksam geworden?

13. Referenzen: Bitte notieren Sie Namen und vollständige Adressen von zwei Personen (z.B. Arbeitgeber, Studienbetreuer, Vermieter; keine Familienangehörige)

14. Bemerkungen:

Die Einreichung der Anmeldung begründet kein Recht auf Aufnahme in das Studentenheim Basel.

Bitte melden Sie sich nur an, wenn Sie bereit sind, Ihren Teil zu einem rücksichtsvollen Zusammenleben und einer guten Atmosphäre im Haus beizutragen sowie die Hausordnung zu respektieren. Wir empfehlen, vor dem Ausfüllen der Anmeldung die Ihnen zugestellten Informationsunterlagen durchzulesen.

Ort, Datum _____ Unterschrift _____