Paul, Hector Kervegan

SKILLS

Full-stack web development

Development of reactive web applications and communication between several applications using APIs:

- Backend: Backend API and application development using Python-Flask, based on PostgreSQL, SQLite, XML databases and IIIF image corpora.
- Frontend: HTML / CSS / JavaScript / TypeScript, Vue.js and Angular frameworks, asynchronous
 communication between frontend and backend, data visualisation (using the JavaScript librairies
 Leaflet, Plotly, Vis.js and Openseadragon).

Database management

- · Relational database administration (PostgreSQL, SQLite).
- Integration of databases within reactive applications (Python-SQLAlchemy).
- · Spatial database management (QGIS, routine automation using Python-QGIS).
- · Graph database querying (SPARQL, RDF).

Data analysis and handling

- Mass processing, analysis and migration of tabular (Python-Pandas), raster (Python-Pillow) and spatial (GDAL) data.
- Natural language processing: named entity recognition and *POS-tagging* using Python (SpaCy, NLTK), statistical analysis of unstructured text, named entity resolution through Wikidata alignment.
- · Notions in network analysis (Python-NetworkX).

XML technologies

- Knowledge and usage of the XML-TEI and XML-EAD standards.
- · Automated XML corpora manipulation using Python-LXML, XSLT and BaseX.

Versionning and deployment

- Version control using GIT.
- Deployment of Web applications on server: SSH and SCP protocols, notions in Apache server configuration.

Project management

Responding to call for projects, organization of scientific events, communicating on digital humanities projects to institutional partners and researchers from various academic backgrounds.

Language proficiency

French (native language), English (bilingual, Cambridge Advanced CAE, CEFR C2 level), Greek (native language), German (CEFR B2 level).

WORK EXPERIENCE

Nov. 2022 - Dec. 2024

Research engineer

INSTITUT NATIONAL D'HISTOIRE DE L'ART, Richelieu. Histoire du quartier

As the research engineer for the *Richelieu*. *Histoire du quartier* programme, I have been in charge of conceiving and implementing a complete data processing pipeline: full-stack development of a web platform aimed towards researchers (REST API, data visualisation and mapping), PostgreSQL database modelling and administration, data migration, GIS management.

Paul Kervegan Curriculum Vitæ

April 2022 - Sept. 2022

End of studies internship École nationale des Chartes ÉCOLE NORMALE SUPÉRIEURE, MSS/Katabase

For the MSS/Katabase research project, I worked towards automating the management and analysis of a database of 500 XML-TEI documents: text mining, named entity resolution and quantitative analysis. I redesigned of the project's website and established a REST API.

June 2021 - Sept. 2021

Internship

ARCHIVES NATIONALES, ANR DesignSHS

From the inception of the *DesignSHS* programme (funded by the French National Research Agency, or ANR), I participated in modelling and enriching a database of historical documents, before carrying out an exploratory study in data visualisation and statistical analysis.

March 2021 – May 2021

End of studies internship École du Louvre

INA GRM

Within the National Audiovisual Institute's Music Reseach Group (INA GRM), I established a database of the GRM's academic publications: archival research, analysis of bibliographic metadata standards, comparative study of open-source database management systems.

EDUCATION

2021 – 2022 Master's degree Digital technologies applied to history

ÉCOLE NATIONALE DES CHARTES

Master's thesis: Modelling, semanting enrichment and dissemination of semi-structured textual corpora: the case of manuscript sales catalogues, under the direction of Lucence Ing (École nationale des Chartes). Available online.

Master's degree Documentation and digital humanities

ÉCOLE DU LOUVRE

Master's thesis: From the first processing to open data. Aims and methodology towards a referencing of the INA GRM's academic publications, under the direction of Françoise Dalex (Musée du Louvre) and Alix Chagué (INRIA).

2019 – 2020 Master's degree, first year Art history and museology

ECOLE DU LOUVRE

Specialised in Socio-cultural European anthropology. First year's master's thesis: "Social objects". The function of instrumentation in noise music, under the direction of Claire Calogirou (CNRS), Sarah Benhaïm (Université de Tours) and Catherine Guesde (Université Paris 8).

Bachelor degree Art history

ÉCOLE DU LOUVRE

Double specialisation in 20th century arts and Contemporary art.

TEACHING AND SCIENTIFIC COORDINATION

Scientific coordinator Studying the city seminar

Institut national d'histoire de l'art

Scientific coordinator of the research seminar: *Studying the city: a dialogue between digital practices and art history.* Conception of the programme, organising the conferences, interlocutor for the guest speakers.

Member of the scientific committee

HUMANISTICA 2024 CONFERENCE

Participation in the peer review process: evaluation and correction of the submissions.

Teaching Introduction to text mining (2h)

ÉCOLE NORMALE SUPÉRIEURE

Part of the *Introduction to Digital humanities* seminar coordinated by Léa Saint-Raymond: hands-on presentation of distant reading techniques using Python (*POS tagging*, lexical density). The source code is available online.

30 march 2023

2016 - 2019

2024

2024

Workshop Modelling and exploiting textual corpora

ÉCOLE NORMALE SUPÉRIEURE

Co-organisation and facilitation with Léa Saint-Raymond of a day-long workshop on the analysis of TEI-encoded textual corpora: named entity recognition, geocoding, data visualisation of 267 letters. The presentation and source code are available online.

Paul Kervegan Curriculum Vitæ

20 february 2023

Teaching Introduction to text mining (2h)

ÉCOLE NORMALE SUPÉRIEURE

Part of the *Introduction to Digital humanities* seminar coordinated by Léa Saint-Raymond. The presentation was focused on data analysis using Python (regular expressions, API, data visualisation). The source code is available online.

Honours

2023

2020

"Open science" award

Ministère de l'enseignement supérieur et de la recherche

The Richelieu. Histoire du quartier research programme was awarded from the French Ministry of Higher Education an Open science award for research data, in the category "Reusing data – young researchers"

"Young reseachers" award

IASPM -- BFE

My paper Instrumental transition: redefining the electric guitar through noise practices was awarded the 2020 young researchers award of the International association for the study of popular music – Branche Francophone d'Europe.

PUBLICATIONS

Duvette, Charlotte and Paul Kervegan (2024a). "Accessing urbanity through art historical sources: a situated digital humanities approach". In: *Journal of Data Mining and Digital Humanities* (À paraître).

 (2024b). "Culture visuelle et questions d'échelle. Modéliser un ensemble monumental en milieu urbain à partir de ses représentations". In: *Humanistica 2024*. Humanistica. Place: Meknès, Maroc. Humanistica, l'association francophone des humanités numériques.

Kervegan, Paul, Charlotte Duvette, et al. (June 2023). ""La marque du lieu" dans le "quartier Richelieu"". In: *Humanistica 2023*. Géographie. Place: Genève, Switzerland. Humanistica, l'association francophone des humanités numériques. URL:

https://hal.science/hal-04108218 (visited on 02/28/2024).

Christensen, Kelly et al. (Jan. 2022). Projet Exposition Universelle de 1878. DOI:

10.5281/zenodo.6126447.URL:

https://htr-united.github.io/share.html?uri=2c673f312 (visited on 12/11/2023).

Presentations

Duvette, Charlotte and Paul Kervegan (Apr. 2, 2024c). "Richelieu. Histoire Du Quartier, a Digital Ecosystem for the Analysis of the Urban Experience through Historical Sources". In: *DHAI: Digital Humanities and Artificial Intelligence.* Paris, France.

Duvette, Charlotte, Paul Kervegan, Elsa Marguin-Hamon, et al. (Apr. 21, 2024). "Patrimoines Partagés et Numérisation – Mettre En Commun Les Collections". In: *Rendez-Vous Chine de La Cité de l'architecture*. Paris, France. URL:

https://www.citedelarchitecture.fr/fr/agenda/colloque-conference-debat/patrimoines-partages-et-numerisation-mettre-en-commun-les (visited on 04/29/2024).

Kervegan, Paul and Charlotte Duvette (Apr. 12, 2024). "Le projet "Richelieu - Histoire du quartier"". In: Séminaire du GTSO Données. DOI: 10.5281/ZENODO.10964202. URL: https://zenodo.org/doi/10.5281/zenodo.10964202 (visited on 04/24/2024).

Duvette, Charlotte and Paul Kervegan (Nov. 6, 2023a). "Chapeliers, Architectes, Nouveautés : Géo-Analyse Des Activités Visibles et Invisibles d'un Quartier". In: Res(t)Ituer Les Annuaires Commerciaux et Les Évolutions de l'espace Parisien Du XIXe Siècle. Partager l'expérience et Les Ressources Du Programme ANR SoDUCo. Paris, France. URL:

 $\label{lem:https://soduco_geohistorical data.org/soduco_bnf_seminars/ (visited on o4/o1/2024).} \\$

— (Nov. 13, 2023b). "Rich.Data: Un Dialogue Entre Pratiques Numériques et Histoire de l'art". In: La Fondation Des Sciences Du Patrimoine Fête Ses 10 Ans à La Philharmonie de Paris! Paris, France. URL: http://www.sciences-patrimoine.org/fsp-evenement-10-ans/ (visited on 12/11/2023).

Duvette, Charlotte, Paul Kervegan, Justine Gain, et al. (Apr. 3, 2023). "Le Projet "Richelieu. Histoire Du Quartier"". In: *Ateliers de l'INHA*. Paris, France.

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Paul Kervegan Curriculum Vitæ

Kervegan, Paul, Jean-Christophe Carius, and Nadine Gastaldi (Dec. 5, 2023). "De La Cartographie Au Web Design: Quelles Formes Pour Restituer La Matérialité Des Sources et l'évolution Urbaine". In: Étudier La Ville: Un Dialogue Entre Pratiques Numériques et Histoire de l'art. Paris, France.

Kervegan, Paul, Colin Prudhomme, and Jean-Philippe Moreux (Nov. 7, 2023). "Modéliser et Représenter Un Lieu Dans Les Humanités Numériques : Regards Croisés". In: Étudier La Ville : Un Dialogue Entre Pratiques Numériques et Histoire de l'art. Paris, France.