Job Posting:170741 - Position: F25 Co-op Student - Digital Archive & AI Assistant Developer 170741

Co-op Work Term Posted:	2025 - Fall
App Deadline	06/30/2025 09:00 AM
Application Method:	Through UBC Science Co-op
Posting Goes Live:	06/16/2025 03:05 PM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	UBC Mineral Deposit Research Unit
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Fall
<b> Job Title <b>	F25 Co-op Student - Digital Archive & AI Assistant Developer 170741
Position Type	Co-op Position
Job Location	Vancouver, BC
Country	Canada
Duration	4 months
Work Mode	Hybrid
Salary Currency	CAD
Salary	0.0 per hour for 0 Major List
Salary Range $	$3250-$3750

Job Description

About the Role:

MDRU is seeking a motivated and technically skilled co-op student to support the digitization, structuring, and modernization of MDRU's extensive research archive. The goal is to transform decades of geological and related project data (including scanned lab reports, geoscience publications, spreadsheets, maps, and images) into a searchable, queryable digital platform accessible to researchers and collaborators. This position combines web development, data science, and applied AI skills to help integrate structured and unstructured documents into a unified database using web technologies, AI/NLP tools, and good data stewardship practices.

Key Responsibilities:

• Assist in designing and deploying a searchable digital interface using platforms such as OpenSpaces or similar.

• Design and prototype tools to allow AI-powered querying and sematic search across archive content.

• Design and prototype tools to allow collation of PDF documents from UBC library and other UBC accessible websites using API approach.

• Structure and integrate data from mixed formats (PDFs, Word docs, Excel files, scanned maps, and tables) into usable and searchable databases.

• Support metadata tagging, content indexing, and standardization of datasets for long-term accessibility.

• Implement and maintain backend systems, including handling APIs, data preprocessing, and indexing.

• Ensure system stability, usability, and adherence to best practices in data privacy and digital archiving (e.g., using the FAIR principles).

• Document code, workflows, and assist in building scalable systems for future archive expansion.

Job Requirements

Required Qualifications:

• Currently enrolled in a post-secondary program in Computer Science, Data Science, Software Engineering, or related fields.

• Experience with website development frameworks (HTML/CSS/JavaScript, React, etc.).

• Proficient in Python, especially for data preprocessing, document parsing, and API integration.

• Familiarity with AI/NLP concepts, tools, and deployment.

• Comfortable working with structured (e.g., Excel, CSV) and unstructured (e.g., PDFs, scanned text) data.

• Excellent problem-solving skills, detail-oriented, and the ability to work independently.

Preferred Qualifications:

• Experience with search systems (e.g., Elasticsearch, vector databases).

• Familiarity with OCR tools and document digitization practices.

• Experience working with open-source platforms or CMS tools like OpenSpaces.

• Interest in scientific research, geoscience, and/or digital libraries.

What You will Gain:

• Hands-on experience in applied AI, NLP, and research data digitization.

• Opportunity to contribute to a long-term digital transformation initiative in academic geoscience.

• Mentorship from MDRU researchers and collaboration with cross-disciplinary teams.

• Real-world experience deploying functional tools with direct user impact.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through UBC Science Co-op
Cover Letter Required? Yes
Address Cover Letter to Dr. Shaun Barker, Director