

Abundant Intelligences & Aboriginal Territories in Cyberspace

Associate Director - Emerging AI Technologies

Application deadline: Will close when the position is filled

Start date: ASAP. Contract is for 1 year, with the possibility of renewal up to 2 years.

Salary: \$150k range per annum

Hours per week: 40 hours/week

Position title: Associate Director, Emerging AI Technologies

Primary Investigator: Prof. Jason Lewis

Immediate supervisor: Director, Research Operations

Location: In-person based at the PI's research studio at Concordia University in Montreal (Sir George Williams Campus).

Context

Aboriginal Territories in Cyberspace

[Aboriginal Territories in Cyberspace](#) (AbTeC) is a research network of artists, academics, activists, and technologists exploring the intersections of Indigenous cultural expression, knowledge frameworks, and computational technologies. [Prof. Jason Edward Lewis](#) is AbTeC's Primary Investigator (PI). AbTeC is part of the [Indigenous Futures Research Centre](#) (IFRC), which, in turn, is part of Concordia's [Milieux Institute for Arts, Culture and Technology](#).

Abundant Intelligences: Integrating Indigenous Knowledges and AI

One of its AbTeC's major research programs is [Abundant Intelligences](#) (AbInt), a six-year initiative exploring how to integrate Indigenous Knowledges and Artificial Intelligence systems. The AbInt research team currently consists of 47 co-investigators and collaborators at 9 universities and 12 community organizations in Canada, the United States, and New Zealand.

Websites: www.abtec.org, www.abundant-intelligences.net, www.ifrc.ca

Summary of position

The incumbent will have two main responsibilities. The first is to provide expert technical guidance on emerging AI technologies to the Abundant Intelligences research leadership team as well as to the program's research partners. This includes contributing to collaborative research efforts, and assisting the program in maintaining high standards of excellence. The second is to supervise the team maintaining the technical infrastructure for the research lab that is home to AbInt, AbTeC, and the IFRC.

The incumbent will be responsible for developing and recommending technical specifications that align with both the research objectives and budgetary constraints set by funding bodies. This role encompasses the crucial task of liaising with research partners and their associated labs and Concordia's IT services, ensuring seamless integration and collaboration. The position requires a strategic approach to balance technical requirements with research priorities, financial considerations, organizational capacity, promoting effective resource utilization and

fostering strong relationships with all rights- and stake- holders involved in the research lab's activities.

The incumbent will exercise considerable autonomy in advising and implementing technical solutions to meet diverse research objectives. This role requires a person who is passionate about staying current with innovations in AI research, development, and deployment, and communicating them to the leadership team and research partners.

Responsibilities

Create Strategy for Building AI Technology Infrastructure for Abundant Intelligences

- Consult with research team leadership and partners to understand their research goals related to Abundant Intelligences;
- Develop plans for building appropriate infrastructure in the research lab, and for supporting associated research labs in building their infrastructure;
- Lead implementation of the plan.

Guide and Shape

- Provide technical leadership and guidance on emerging trends and challenges in AI, edge computing, data governance, and research cyberinfrastructure.
- Lead technical network and partnership efforts related to tech ethics, tech selection, and training frameworks. Collaborate with IT services and external partners to align technical strategies.
- Identify and advise on the application of AI or machine learning techniques to research activities considering costs, scale, and privacy concerns.
- Anticipate and formulate responses to technical challenges and unforeseen issues.
- Contribute to written publications regarding technical concepts developed or employed within the program.

Design & Implementation of Lab Infrastructure

- Design technical workflows for all research projects in the lab;
- Proactively communicate technical concepts, design, implementation, and participate in troubleshooting;
- Oversee maintenance and upgrades for lab research technical infrastructure;
- Supervise one Technical Manager and one to two Technical Assistants who will conduct the day-to-day maintenance of technical infrastructure;

Work within parameters

- Work closely with the finance manager to manage and forecast equipment and staffing budgets.
- Set and maintain clear expectations, holds oneself accountable to commitments, timelines, and responsibilities

Abundant Intelligences - Job Posting

- Oversee maintenance of up-to-date documentation of digital assets, system design, troubleshooting processes, following organizational policies and/or updating or creating new policies and procedures as needed.

Qualifications

- Master degree in computer science, software engineering, or closely related field experience pertinent to the primary responsibilities
- A minimum 4 years proven experience managing AI/ML research or cyberinfrastructure research programs including experience in the ethical, legal, social, and governance issues of artificial intelligence and related digital technologies at large scale, complex, or international scales.
- Strong programming skills and past experience working with artificial neural networks and other machine learning models
- Experience with high performance computing (HPC) environments, including working knowledge of cloud compute and storage technologies, strong proficiency in AI/ML products, familiarity with platform engineering or DevOps and key infrastructure technologies
- Demonstrated leadership abilities, with the capacity to influence cross-functional teams and oversee complex projects.
- Excellent organizational skills and follow-through.
- Commitment to design thinking & adherence to system design principles, with an eye towards new developments in machine learning infrastructure, configuration management, and infrastructure-as-code.
- Ability to respond strategically and methodically to change. An ability to understand and plan for future changes in requirements is vital.
- Familiarity with Agile methodologies, backlog planning, and a proven track record in product delivery / execution.
- Strong interpersonal and management skills, and comfort working with team members from a wide variety of disciplines including computer science, humanities, Fine Arts and Design.
- Good communication skills with the ability to work independently and as part of a team
- Proficient in English written and spoken communication (Level 5); French proficiency (Level 4) a plus.

Testing required: The language skills of qualified candidates may be tested.

How To Apply:

Please send your CV and cover letter to ifrc-jobs@concordia.ca.

The position is subject to all conditions outlined in the [CARE collective agreement](#)

Territorial Acknowledgement

Concordia University is located on unceded Indigenous lands. The Kanien'kehá:ka Nation is recognized as the custodians of the lands and waters on which we gather today.

Abundant Intelligences - Job Posting

Tiohtià:ke/Montreal is historically known as a gathering place for many First Nations. Today, it is home to a diverse population of Indigenous and other peoples. We respect the continued connections with the past, present and future in our ongoing relationships with Indigenous and other peoples within the Montreal community.

Employment Equity

Concordia University is strongly committed to employment equity within its community, and to recruiting a diverse faculty and staff. The University encourages applications from all qualified candidates, including women, members of visible minorities, Indigenous persons, members of sexual minorities, persons with disabilities, and others who may contribute to diversification; candidates are invited to self-identify in their applications.

Adaptive measures

Applicants who anticipate requiring adaptive measures throughout any stage of the recruitment process may contact, in confidence, Anna Barrafato, Accessibility Change Lead, Equity Office at anna.barrafato@concordia.ca, or by phone at 514-848-2424, extension 3511.