THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF HUMANITIES

ALLIANCE MANCHESTER BUSINESS SCHOOL

INNOVATION, MANAGEMENT AND POLICY DIVISION

MANCHESTER INSTITUTE OF INNOVATION RESEARCH (MIoIR)

POST-DOCTORAL RESEARH ASSOCIATE (DATA SCIENTIST)

Vacancy ref: HUM-09390

Salary: £31,076 to £33,943 per annum depending on experience

Hours: Full Time

Duration: Fixed term, available from 1 July 2017 to 31 July 2019

Location: University of Manchester Campus, Oxford Road, Manchester

Responsible to: Dr Abdullah Gök and Prof Philip Shapira

Informal enquiries about the vacancy, shortlisting and interviews:
Name: Dr Abdullah Gök
Email: abdullah.gok@manchester.ac.uk

We seek to appoint a Post-Doctoral Research Associate (PDRA) (Data Scientist) to work on the Knowledge in the making in the European Society (KNOWMAK) project which is sponsored by the EU H2020 programme. This large-scale project will develop a web-based tool, which provides interactive visualizations and state-of-the-art indicators on knowledge co-creation in the European Research Area. As part of this project, Dr Abdullah Gök (principal investigator) and Prof Philip Shapira (co-investigator) focus on identifying and characterising knowledge creators that are not visible in conventional structured data sources. This will involve developing approaches to utilise unstructured textual data from a variety of online sources.

The PDRA will design and implement strategies to collect, process, analyse and infer textual data by employing cutting-edge natural language processing (NLP) approaches. The PDRA will be responsible for the collection of data from a variety of sources (e.g. publications, patents, policy documents, websites, social media, twitter, ResearchGate, Linkedin, Mendeley, etc.) through automated and semi-automated techniques (e.g. APIs, scrapers, etc.). The PDRA will employ NLP techniques to analyse the textual data gathered, indexed and stored in a database. The PDRA will be associated with the Emerging Technologies and Governance theme at the Manchester Institute of Innovation Research (MIoIR) under the direction and supervision of Dr Abdullah Gök and Professor Philip Shapira. The PDRA will be a part of a multidisciplinary team at the MIoIR while he/she will have extensive linkages to the other project partners including the University of Sheffield NLP Group.

The Manchester Institute of Innovation Research is a world leading centre for the study of science and innovation policy and management, located in the Alliance Manchester Business School in the Faculty of Humanities. Our 45 members of staff and 50 doctoral students build on more than five decades of interdisciplinary science, technology and innovation studies in Manchester. Our research, teaching and engagement activities are based upon a guiding principle of excellence, both in terms of academic rigour and societal relevance. The Alliance Manchester Business School is the UK's largest campus-based business and management school and is recognised as a leading centre for business and management research (2nd in the 2014 UK Research Excellence Framework for business school research power). The University of Manchester enjoys a reputation for ground-breaking research and innovation.

Working for the University of Manchester:

The University of Manchester strives to make our community a welcoming, caring and enthusiastic one, fuelling ambition with opportunities and support to help us all achieve our personal and professional goals.

Our diverse job opportunities include an attractive benefits package with family-friendly policies that provide for flexible working. We care deeply about career and personal development, offering a structured induction programme for new staff, an annual performance and development review, staff training for all career stages and mentoring opportunities to support your career development.

We have a genuine commitment to equality of opportunity for our staff and students, and are proud to employ a workforce that reflects the diverse community we serve.

As a global institution, situated at the heart of a lively, culturally diverse city, we welcome applicants of all nationalities. To help international job applicants plan for life in the UK, we have put together some useful information on passports and visas, travel to the UK, accommodation and a number of other practical considerations.

How to Apply:

Please apply on-line at https://www.jobs.manchester.ac.uk/displayjob.aspx?jobid=12719 attaching a recent CV. In the additional information section, please include a cover letter stating how you meet the essential and desirable criteria, including your capabilities, experience, and interests*.*
Important Dates:
Applications close: 03/03/2017
Interviews: 21/03/2017
Start Date: 01/07/2017

Key Responsibilities, Accountabilities or Duties:

- Contribute to and support the work of the principal investigator.
- Carry out relevant required research duties in relation to the project.
- Design and implement strategies to collect textual data from a variety of sources (e.g. publications, patents, policy documents, websites, social media, twitter, ResearchGate, Linkedin, Mendeley, etc.) through automated and semi-automated techniques.
- Identify the challenges and opportunities, and analyse and infer textual data by employing cutting-edge natural language processing (NLP) approaches.
- Lead or participate writing up high quality research publications and presenting research in conferences.
- Train other staff in technical topics.
- Work closely with other members of the MIoIR as well as our user communities and project partners
- Lead or participate in the writing of journal articles and other publications.
- Participate in meetings at MIoIR and elsewhere around Europe and in project coordination / dissemination meetings.

- Have regular meetings with the investigators to report on the progress of the project and discuss the ongoing research.

Person Specification:

Essential knowledge, skills and experience

1. Be educated to PhD level (or equivalent) within a relevant field including computer science, information science, data science and technology, science and innovation studies, management and economics, or other cognate disciplines.
2. Excellent spoken and written English language abilities.
3. Knowledge and experience of collecting, processing and analysing unstructured textual data through automated and semi-automated techniques.
4. Knowledge and experience of working with standard NLP tools (e.g. GATE, RapidMiner, R and phython packages).
5. Knowledge and experience of building, maintaining and working with databases, including the programmatic access and data fetching.
6. Fluent in programming languages, preferably Python or R.
7. Self-motivated and able to work flexibly either independently or as part of a multi-disciplinary team, build contacts and participate in networks for the exchange of information, and form relationships for collaboration.
8. Ability to plan work and meet deadlines.
9. Ability and flexibility to travel to attend meetings, conferences and workshops in the UK and overseas.

Desirable knowledge, skills and experience:

1. Broad familiarity with the economics and management of innovation and emerging technologies.
2. Knowledge and experience of data science methodologies and software, statistical analysis and major statistical analysis software packages.
3. Ability and experience of training other staff in technical topics.
4. Ability and experience of working with patent and publication data.
5. Experience in writing / publishing book chapters and / or journal articles and / or technical reports and presenting at conferences.