

THE UNIVERSITY OF MANCHESTER

PARTICULARS OF APPOINTMENT

FACULTY OF HUMANITIES

ALLIANCE MANCHESTER BUSINESS SCHOOL

MANAGEMENT SCIENCES AND MARKETING DIVISION

LECTURER OR SENIOR LECTURER IN DATA SCIENCE

VACANCY REF: HUM-017883

Salary:	Lecturer Grade 6/7 £33,309 to £40,927 Senior Lecturer Grade 8 £53,348 to £69,557 per annum, dependant on relevant experience
Hours:	Full time
Duration:	Permanent from 1 February 2022 or soon after
Location:	Oxford Road, Manchester

Enquiries about the vacancy, shortlisting and interviews:

Name: Dr. Richard Allmendinger

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Overall Purpose of the Job:

Alliance Manchester Business School is seeking a Lecturer or Senior Lecturer in Data Science. This post is part of a larger recruitment of ten data science posts during 2021-22 to expand the existing vibrant staff team. Amongst other goals we are aiming to expand Manchester's provision of Data Science Teaching and Learning.

We have an existing unique interdisciplinary MSc Data Science programme, which is incredibly popular with over 3000 applications this year for 50 places. Phase one of the new programme is to expand intake numbers to 200. Phase 2 will build a similarly innovative interdisciplinary BSc programme. The new staff team will be pushing forward the development plans and this particular post would provide leadership of the Alliance MBS pathway on this multi-school programme.

It is essential that teaching staff on the programme are research active and so applicants must have (or be about to complete: by end of 2021) a PhD degree and possess an established/growing international reputation in Data Science or related discipline, supported by a record of published research output and a wider record of achievement.

The post will involve a balanced portfolio of research, teaching, impact and leadership excellence. More generally, the successful candidate will have the ability to deliver excellent teaching at undergraduate and postgraduate levels across the programmes run by the division,

in Manchester, online and potentially at our Global centres. The normal terms and conditions of the University of Manchester apply to the post.

The School is strongly committed to promoting equality and diversity, including the Athena SWAN charter for gender equality in higher education. The School holds a Bronze Award, which recognises our good practice in relation to gender; including flexible working arrangements, family-friendly policies, and support to allow staff achieve a good work-life balance. All appointments will be made on merit.

Key Responsibilities, Accountabilities Or Duties:

Research and Teaching

- Provide academic leadership in her/his research field including development, mentoring and career management advice to junior colleagues.
- To conduct research with Data Science and related fields and produce high quality, internationally excellent publications.
- To apply for external research funding, as and where appropriate.
- Contribute to and develop teaching in Data Science at both UG and PGT levels.
- To seek to develop impact and engagement with non-academic audiences and partners.
- Take part in conferences and other forms of academic engagement, including international engagement.
- Undertake PGT and PGR supervision; and mentoring of early career researchers.
- Design and deliver high quality teaching and learning materials in Data Science and provide timely and effective support and feedback to students.
- Undertake and develop traditional and blended teaching at UG and PGT levels, in a variety of settings, from small group seminars to large lectures (on-line or face to face).
- Provide appropriate academic advice and support to students both individually and in groups.

General

- Undertaking such administrative or academic service, pastoral and other duties as may be assigned.
- To ensure that all Health & Safety policies, procedures, rules and regulations are adhered to. Ensuring that all staff and students under your supervision are provided with relevant local Health & Safety information.
- To ensure that University information is shared and processed lawfully according to GDPR (The General Data Protection Regulation 2016).
- Be responsible for only collecting and retaining the minimum amount of personal data necessary to carry out your function and to only retain it for as long as specified in the University Records Retention Schedule, reporting any data breaches to the University's Information Governance office.

Person Specification

Essential Knowledge, Skills and Experience: Lecturer (Grade 6)

- Possess a relevant doctoral degree (or obtain it by end of 2021) and/or appropriate professional qualification.
- Possess sufficient breadth or depth of specialist knowledge in the discipline to work within established teaching and research programmes.

- Aptitude to engage in continuous professional development.
- Able to engage the interest and enthusiasm of students and inspire them to learn.
- Able to develop familiarity with a variety of strategies to promote and assess learning (including online, in person and blended contexts).
- Ability to contribute to broader management and administrative processes.
- Ability to assess and organise resources.
- Understand equal opportunity issues as they may impact on academic content and issues relating to student need.
- Possess very good written and spoken English.
- Experience in using Python libraries for Business Analytics applications (scikit-learn, numpy, pandas, etc) or willingness to learn Python to a level sufficient for MSc teaching (e.g. Programming in Python for Business Analytics).

In addition, for Lecturer (Grade 7):

- A higher academic standing with a growing reputation in subject specialism.
- Possess sufficient breadth or depth of specialist knowledge in the discipline to develop teaching and research programmes.
- A record of successful teaching, including class-room and/or online delivery and related support in respect of allocated teaching duties.
- A record of successful supervision of PGT and PGR students.
- A record of effective setting and marking of assessment, including provision of feedback to students.
- A record of effective delivery of student support as required by post.
- Efficient performance of service and leadership tasks in respect of allocated duties.

Essential Knowledge, Skills and Experience: Senior Lecturer (Grade 8)

(Essential requirements for a lecturer, plus)

- Demonstrable excellence in research as evidenced by high quality track-record of high-quality, peer reviewed international research publications or other equivalent recognised forms of research output appropriate to the discipline.
- Be an externally recognised authority in the subject area, with in-depth understanding of own specialism to enable the development of new knowledge and understanding within the field.
- Experience of successfully supervising doctoral students to completion.
- A record of seeking, or capability to seek, research grant and/or external income.
- Evidence of willingness to support the careers of colleagues.
- Evidence of successful academic leadership and management.
- Ability to contribute to a wide range of administrative tasks at a strategic level within the School.
- Demonstrable evidence of high quality teaching: innovative approaches to online, in person and/or blended teaching, supervising or assessment; and the use of a range of delivery techniques to enthuse and engage students.
- Significant experience in the planning and delivery of new undergraduate and taught postgraduate courses and programmes.

Desirable:

- A track record of research grant and/or external income generation.
- A demonstrable track record of working with other disciplines.
- Some successful involvement in service to relevant University level, external academic or professional institutions or networks
- Research and ideally teaching expertise in at least one of the following topics: Social Media and Text Analytics, Advanced Visualisations (using e.g. Python), Explainable/Fair/Reliable/Safe/Trustworthy AI, Reinforcement Learning, and Quantum Computing for Business Applications.
- Familiar with the use of commercial business analytics tools (e.g. Power BI, Tableau, SAS), programming languages in addition to Python (e.g. R, Julia), and database systems/languages (e.g. MySQL, MongoDB, PHP, JSON).
- To be willing and able to travel globally for research (T&R only) and teaching.
- A record of achievement with respect to **some** of the following criteria:
- A record of productive involvement in social responsibility; translating research into beneficial activity or positive change in the wider community.
- Active participation in advisory committees or professional or practice-based forums relevant to discipline. Membership or collaborative experience with appropriate learned societies and/or professional bodies.
- A record of productive involvement in knowledge creation and transfer in partnership with industry, government, NGOs, learned societies or professional bodies.
- A record of activity that enhances public understanding of, and engagement with, knowledge and research, or that contributes to well-informed public debate.
- A record of external engagement using academic expertise or experience in support of the University's social responsibility goal.
- Some evidence of influence on professional practice or on policy, including participation in professional or practice-based forums relevant to the staff member's discipline.
- Creation, development and exploitation of intellectual property, including open access material.
- The ability to write and communicate effectively with policymaker and practitioner audiences. To disseminate research through publication in other journals and events oriented at policymakers and practitioners.

FURTHER PARTICULARS

BACKGROUND

HOME DEPARTMENT/SCHOOL for this post: Management Science and Marketing Division, Alliance MBS, The Faculty of Humanities, University of Manchester.



The Faculty of Humanities and Alliance Manchester Business School

The Faculty of Humanities

[The Faculty of Humanities](#) is made up of five Schools: Environment, Education and Development; Law; Social Sciences; Arts, Language and Cultures; and the Alliance Manchester Business School. With 36 discipline areas, a total income over £230m per annum, over 16,800 students, almost 1300 academic and over 650 professional support staff, the Faculty is equivalent to a medium-sized university in the UK. All the departments in the Faculty recruit students globally and the overwhelming majority of our academics have international reputations for the quality of their research. [REF 2014 results](#) confirmed The Faculty and the University of Manchester as a genuine international powerhouse, with exceptional performances in a wide range of disciplines. The University is committed to the ongoing enhancement of the international profile of the Faculty of Humanities

Alliance Manchester Business School

At Alliance Manchester Business School, '[Original Thinking Applied](#)' sits at the heart of everything we do. With triple accreditation from AACSB International, AMBA and EQUIS, we provide world-class, industry-focused education to undergraduates, postgraduates and executives across the globe. Our centres in Dubai, Hong Kong, São Paulo, Shanghai and Singapore open up a world of opportunities for our students, researchers and clients. All over the world, we engage with businesses of all sizes to share expertise and form rewarding partnerships. Ranked 2nd in the UK for research power, our influential research impacts all areas of business and management – from accounting and health management to big data and human rights.

Established in 1965 as one of the UK's first two business schools, we are proud to be part of the prestigious University of Manchester and the UK's largest campus-based business and management school.

Our Vision and mission

Our vision is to be a world renowned Business School, harnessing virtuosity for the enduring benefit of human kind. Our mission is to give everyone the opportunity to transform their lives and, in doing so, help them transform the organisations they work for and the wider communities in which they live. This vision and mission is captured in our School strapline, Original Thinking Applied. As one of the original Business School established in the UK, we are inspired by Manchester which is renowned as the original modern city with an ethos of enterprise, culture and innovation. Our thinking has generated research on issues including the transitions to sustainability, the conditions for innovation in services, changing patterns of work and employment and public sector infrastructure finance and accountability. Our work is applied in our research-led teaching and consultancy, impact and public engagement.

Management Sciences and Marketing Division

This role sits within the Management Science subject area within the MSM division. Our work brings together theories, models and techniques ranging from information extraction to many types of decision support across a range of research methodologies and analytical techniques. This spreads across a range of potential domains such as decision sciences, information systems, operations and supply chain management. We currently collaborate with national and international businesses as well as local and national government bodies, so there is strong potential to work with a range of excellent partners. The results of our multi-disciplinary approach to real-world problems enable us to develop new theories, models and teaching. We lead exciting initiatives, such as creating a new data visualisation lab which brings to life the value of data through immersive and interactive display. Our staff publish in the top journals in the above areas, some of which are: Journal of Product Innovation Management; Journal of Operations Management; European Journal of Operational Research; International Journal of Operations and Production Management; Production and Operations Management; IEEE Transactions on Systems, Man, and Cybernetics; Information Systems Journal; Information & Management, Decision Sciences, Research Policy and Management Science.

Data Science: The Manchester Way

The appointee will convene and deliver teaching on our Master's programme in Data Science and will be involved in the development of the planned BSc Data Science programme. Duties will include marking, providing student feedback and supervising dissertations. Teaching-related administrative work as well as the peer review of teaching of Graduate Teaching Assistants also falls into the responsibility of this role.

The post holder will be expected to pursue their own research interests and produce academic publications and will be encouraged to join the active research groups across the university and to contribute to the research seminar series.

Our innovative MSc in data science is an opportunity for graduates from a broad range of disciplines to develop data science skills. Our goal is to help students develop into agile, skilled

data scientists, adept at working in variety of settings and able to meet the challenges and reap the rewards of interdisciplinary team work.

The programme itself has been developed and is run by a team of academic staff in six different schools at the university and students similarly come from a wide range of backgrounds. With teamwork built into the programme throughout, students leave equipped with important transferable skills as well as the technical capabilities needed to take up data facing jobs throughout the global economy.

Pathways

The range of pathways through the programme reflect the interdisciplinary nature of the course:

- Applied Urban Analytics
- Business and Management
- Computer Science Data Informatics
- Environmental Analytics
- Mathematics
- Social Analytics

The programme is incredibly popular with 3000 applications this year for 50 places. This has the benefit of us being able to recruit high quality students creating virtuous circle of a flagship programme. Students are also very diverse in terms of country of origin – providing perhaps unusually in UK universities a truly international experience.

We are recruiting ten new staff during 2021-22 to form the core of the team to take this development to the next level. During phase 1 the existing MSc programme will be expanded to 200 students. Then during phase 2, a new BSc Data Science will be developed using the same interdisciplinary framework as the MSc. This will eventually take over from the MSc as the primary programme in line with our strategic view that data science will spread throughout the curriculum.

Working for The University of Manchester

The University of Manchester is the largest single-site university in the UK with around 38,000 students and more than 11,000 staff. Our [vision](#) is to become one of the top 25 research universities in the world and we are committed to delivering an outstanding teaching and learning experience, contributing to the social and economic success of local, national and international communities, producing the highest calibre graduates, and developing our staff to be amongst the very best of their peers. To achieve our ambitious goals we aim to attract and retain the very best people to work across a range of academic disciplines and support functions.

The University of Manchester Library is one of only five National Research Libraries and, as such, it is one of the best-resourced academic libraries in the country. Manchester Central Library reopened to great acclaim in March 2014 following a massive refurbishment which has not only preserved its historic features but has also transformed it to 21st century standards. The neo-gothic John Rylands Library on Deansgate, with its spectacular Reading Room, holds the University's Special Collections and hosts regular exhibitions and events.

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. We also offer a generous [relocation service](#) to those relocating to Manchester.

The City and the Region of Manchester

Manchester is one of the great European cities and the University's main campus is within walking distance of the city centre. The city's architecture represents one of the high points of Victorian achievement. The modern city is a major centre of banking, commerce and manufacturing, and hosts MediaCity UK, the country's most significant centre for creative and digital businesses.

Manchester has a highly cosmopolitan atmosphere and its cultural life is internationally renowned. Within a fifteen minute walk of the campus there are three outstanding professional theatre companies, the halls of the Hallé and BBC Philharmonic orchestras, the HOME arts centre and other cinemas, and Europe's fastest-growing Chinatown. Amongst developments enriching the area's cultural life have been: the opening of The Lowry at Salford Quays; the Bridgewater Concert Hall; Urbis, the Imperial War Museum North, designed by Daniel Libeskind, and the refurbished City Art Gallery.

Manchester is renowned internationally for sport: it is a venue for Test cricket and the home of Manchester United and Manchester City. The Commonwealth Games were held in Manchester in 2002. The University is a stakeholder in the Commonwealth Pool – now known as the Manchester Aquatics Centre – which offers on campus, world-class swimming facilities. Manchester boasts many outstanding restaurants, catering to a very wide variety of culinary tastes and budgets. It is home to Europe's fastest-growing Chinatown and, a short walk south of the University, perhaps the best stretch of road in the entire country for Indian and Pakistani food.

Housing is varied, plentiful and, by English standards, moderately priced. There are excellent schools across the region. Manchester is well served by a major international airport, with direct scheduled flights to many destinations in Europe as well as North America and Asia. Manchester Piccadilly railway station has been refurbished and is served by inter-city and other train services – with a direct link to Manchester Airport. The expanding network of Metrolink tram services offers an alternative mode of public transport from certain parts of the conurbation. Some of the most beautiful countryside in Europe is just over a thirty minute drive from the University, in the Peak District National Park, while the Lake District and Snowdonia are also within easy reach.

Commitment to Equality, Diversity and Inclusion

The University of Manchester and Alliance Manchester Business School are committed to creating an environment where diversity is celebrated and everyone is treated fairly, regardless of gender,

gender identity, disability, ethnic origin, religion or belief, sexual orientation, marital or transgender status, age, or nationality.

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.

Our University is a very diverse community: 16% of our staff are from a black and minority ethnic background, women make up 48% of our workforce, and international staff members make up 22%. We also have more than 40,000 students, including 11,000 international students from more than 160 countries.

Equality Objectives:

1. Improve the representation of women and black and minority ethnic (BME) staff in senior leadership, academic and professional support positions.
2. Take action to further understand and improve the experience of disabled staff as indicated in the staff survey.
3. Take action to further understand and address any differential outcomes of undergraduate students in relation to access, retention, attainment and progression to a positive graduate destination in relation to disability, ethnicity, gender and socio-economic status.
4. Take action to understand and address any inequalities for researchers.
5. To better understand the challenges, obstacles and barriers faced by different groups at the University and to foster good relations between people who share a relevant protected characteristic and those who do not share it.
6. Better understand the potential impact of University functions on certain groups by improving disclosure rates and reporting mechanisms for age, disability, ethnicity, caring responsibilities, religion or belief (including lack of belief) sexual orientation and gender reassignment.

Charter Marks:



Alliance Manchester Business School currently holds an Athena Swan Bronze Award. The Athena Swan Charter was established in 2005 to encourage and advance the careers of women in STEMM employment. In May 2015 the Charter was expanded to include non-STEMM Schools, professional and support staff, technical staff, and Trans staff and students. The Charter now also recognises work undertaken to address gender equality more broadly, and not just barriers to progression that affect women.



The [Race Equality Charter Mark](#) aims to improve the representation, progression and success of minority ethnic staff and students within higher education.

It is owned by the Equality Challenge Unit, ECU, which works to further and support equality and diversity for staff and students in Universities and Colleges.

The framework for the race equality charter mark builds on the experience and methodology of ECU's Athena SWAN Charter.

The University of Manchester was proud to be one of the 31 higher education institutions involved in the trial of the Race Equality Charter Mark



The University of Manchester placed 20th in the 2019 Stonewall Equality Index making it the most inclusive University in England for Lesbian, Gay, Bisexual and Trans* employees.

Stonewall is Britain's leading charity for lesbian, gay, bi and trans equality, working to create a world where every single person can be accepted without exception.

Stonewall's Top 100 is compiled from submissions to the Workplace Equality Index, a powerful benchmarking tool used by employers to assess their achievements and progress on LGBT equality in the workplace, as well as their wider work in the community and on service provision.

Each organisation must demonstrate their expertise in 10 areas of employment policy and

practice, including networking groups, senior leadership, procurement and how well they've engaged with LGBT communities.



The University is a Disability Confident employer, committed to interviewing all disabled applicants who meet all of the essential criteria set out in the person specification.

Learning, Development and Progression

Staff Learning and Development

The Staff Learning and Development (L&D) team support the personal and professional development of all staff in the University.

They work closely with learning experts around the University including those based in local HR teams and those supporting academic staff and early career researchers (ECR)

L&D offer everything from off the shelf, face to face training, to bespoke one to one development support. By planning activity both in response to the strategic goals of the University and the learning needs of individuals, we aim to become a truly leading learning organisation.

Faculty of Humanities Researcher Development Team

The Faculty of Humanities Researcher Development Team works in collaboration with methods@manchester and artsmethods@manchester to offer relevant, effective and comprehensive professional development for researchers at various stages of their careers. The team work alongside other University training providers, each School in the Faculty and with Researcher Development teams in the other Faculties allowing for shared delivery of training events, and promoting an interdisciplinary approach to the development of first-class research skills



Humanities Teaching Academy

The Humanities Teaching Academy brings together a range of teaching and learning enhancement activities, from training and CPD through to dissemination, projects and awards. Wherever you are on your teaching journey, from TA to Programme Director, opportunities are available to help you develop, share or be recognised for your teaching practice. Development opportunities include:

Academic Staff Promotion

As an equal opportunities employer, Alliance Manchester Business School is committed to promoting equality and diversity for all and will support all suitably qualified candidates for promotion.

The University has a transparent Academic promotions processes and criteria. It seeks to reward activity that contributes to the success of the University in achieving its goals. Colleagues will be expected to take an active approach to their own career development, but will be given support and advice with their applications.

Academic Staff Probation

The University of Manchester has a supportive probation process to ensure newly appointed colleagues are provided with effective support, allowing them to achieve their full potential and to satisfy their career aims in research and scholarship. All probationers will be supported by a mentor and a probation supervisor, and supported through the Faculty "New Academics" development programme