# STRATEGIC PLAN

**2024 - 2028**

Digital Environment Research Institute

# MISSION

Be a beacon for AI and Data Science research through innovative, interdisciplinary, responsible, and impactful work, supporting sustainable development, and equipping researchers with the skills, tools, and foresight to tackle the challenges of the future.

# EXECUTIVE SUMMARY

The Digital Environment Research Institute (DERI) is a pioneering venture for Queen Mary, established to focus specifically on AI and Data Science research to create a vibrant and collaborative research hub in the heart of East London. Launched in 2022, the strategy for 2024-2028 focuses on expanding, and revolutionising research into AI and Data Science, drawing together interdisciplinary researchers to tackle societal issues and growing global challenges. AI is poised to be incorporated into many aspects of day-to-day life, and DERI is perfectly positioned to contribute towards both the innovation, and the responsible and trustworthy implementation of AI and data science technologies.

DERI's 2024-2028 strategic plan outlines how the Institute will evolve and expand over the next four years to contribute towards the overarching mission. DERI aims to undertake world-leading research, uniting those from across disciplines to collaboratively produce impactful results, with real-world applications. The Institute's core Research Themes focus on the environment and sustainability, healthcare and biomedicine, and responsible and explainable AI. These themes provide the structure within which DERI will operate. They are guided by the key priorities outlined in this strategic plan. The direction these priorities provide will underpin progress, creating a roadmap to achieving the Institute's vision.

Research into AI and Data Science is rapidly progressing with frequent advancements and impactful outcomes becoming common place. DERI aims to utilise collaboration as a strength, bringing together researchers in academia, industry, government, healthcare providers, and third-party sectors to deliver outputs that advance understanding, as well as guide, and benefit the world. Focus will remain on creating a strong foundation for the institute to enable long-term sustainability, and core priorities underpin progress for the coming years, establishing key pillars focused on people, excellence, and financial sustainability. Fluidity in the strategy will enable the Institute to evolve at the required pace, with success indicators underlying progress, and benchmarking success.

# PRIORITY ONE

**Create a strong sense of identity as an Institute founded on excellence, collaboration, and responsible innovation.**

Devise and implement a **targeted communication** strategy to outwardly promote the Institute's expertise and research successes, with a targeted approach to inclusive engagement for the broader community. Deliver impact and showcase research expertise.

Utilise targeted initiatives to engage a broader audience and increase the participation and involvement of internal and external stakeholders.

Forge strong working relationships with **key partners** in the AI and Data Science field to grow the Institute's reputation as a hub for collaboration.

Develop mechanisms to increase national and international visibility, growing the Institute's brand and actively promoting the Institute's mission as an interdisciplinary, responsible, and innovative Institution.

Implement **an annual review process** to improve on success and evaluate progress. Create specific, and measurable objectives to support evolution and the institute's development.

Firmly embed the Institute into the wider Queen Mary community, cultivating **an enriched research environment** and contributing to the progress, and thought leadership of the University in the AI and Data Science field.



## SUCCESS INDICATORS

- Each Academic Staff member to be regularly invited or keynote speakers at prestigious events and conferences by year 3.

- Conducting of an annual review process, incorporating feedback and showcasing progress openly, leading to 5 annual reports by 2028.

- Implementation of a communications strategy in 2024, with annual review and revision as needed.

- By year 3, receive a minimum of 5 expressions of interests annually for prestigious funded Fellowships to be hosted in DERI, from external candidates.

- Host an annual DERI Day, from 2024, showcasing research excellence, facilitating engagement, promoting the Institute's mission, and enriching the broader knowledge-base in AI and data science research.

# PRIORITY TWO

## SUCCESS INDICATORS

- Securing of at least one larger collaborative grant (5-10M), per core DERI Professor by 2028.

- 85% of grant applications to be in collaboration with other parties from year 2 onwards.

- Development of individual strategies, and delivery plans for growth by each core DERI Professor for their research areas by the end of 2024.

- Implementation of a strategy to showcase and disseminate impact by year 2.

- Host a minimum of 2 interdisciplinary events annually, targeting new and emerging areas and supporting academic debate, enriching the wider community, and supporting collaboration.

**Advance world-leading research in AI and Data Science and foster growth of the Institute's interdisciplinary research themes**

Foster an environment to enhance **open-minded discussion** and academic debate to facilitate the development of new, inspiring, and mission-driven research ideas, supporting evolution that keeps pace with research advancements.

Forge **interdisciplinary academic relationships** and invite meaningful collaboration to generate broad engagement and diverse research input aligned with the Institute's overarching goals.

Utilise the Institute's cross-cutting position to uplift, and enrich the wider Queen Mary community, positioning the University at the forefront of developments and leading in response to technological transformations.

Conduct world-class research enabled through securing **large-scale research grants** to underpin research activity. Employ interdisciplinarity to support the advancement of research in the field, and target opportunities seeking multidisciplinary teams.

Create individual strategic plans with the core DERI Professors for growth within their research themes aligned with the Institute's mission and objectives. Identify priorities and opportunities for advancement and incorporate metrics to enable review on progress.

Formulate targeted strategies to **disseminate research activity** and showcase impact. Work with internal experts to position the Institute to openly communicate developments and foster an externally facing image of open collaboration.
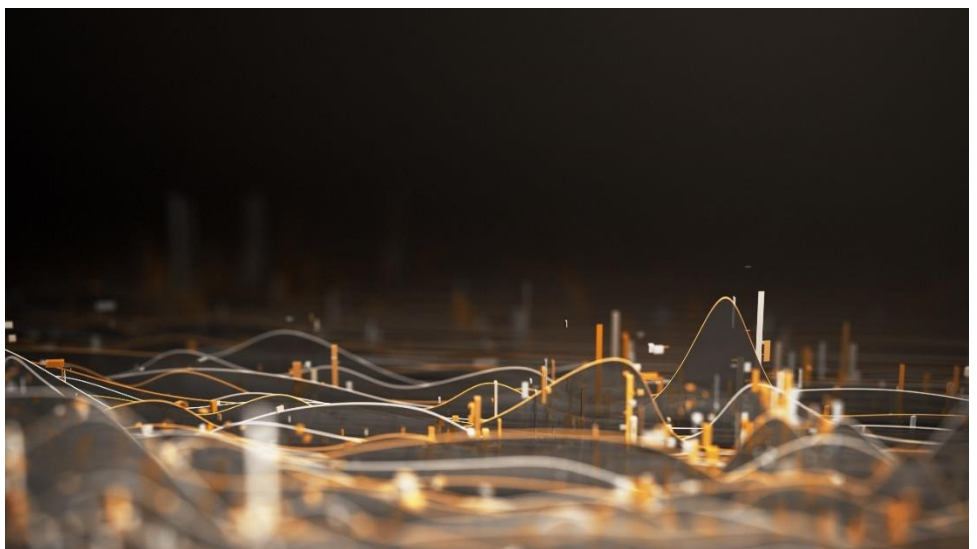
**Forge collaborative relationships with Industry, strengthened through an industrial alliance.**

Identify strategies to target and grow industrial engagement with the Institute. Work with Academic Staff to develop messaging to promote the Institute's mission and disseminate research achievements.

**Foster relationships** with key industrial partners to create an industrial alliance. Forge meaningful relationships and implement mechanisms to enable an impactful membership model supporting growth and development.

Create strategic plans to outline methods to **attract and support** industrial engagement. Implement metrics to measure success and identify development opportunities.

Target **new, and emerging entities** aligned with the Institute's mission. Identify opportunities to support engagement from a diverse set of partners (i.e. NGO's, Government Bodies, Trade Bodies, Charities, Healthcare providers).

Utilise expertise internally, and externally to the Institute to foster industrial engagement. Outline expectations and identify priorities for growth.

## SUCCESS INDICATORS

- Implementation of the Industry Alliance Model by 2025

- 10% of research income to be in partnership with industrial sources by 2028

- Establishment of key relationships with industrial partners, leading to repeated collaboration and meaningful engagement by year 3.

- All core DERI Professors to be engaged by year 3 with activity such as consultancy, subject expert panel membership, or advisory roles demonstrating expertise and growing the Institute's reputation for AI/Data Science capability.

- Securing at least one funding investment to support a targeted collaborative Initiative (i.e. Training, Fellowship, Internship programme) by 2028.

# PRIORITY FOUR

**Attract, and retain talented staff, embedding diversity and inclusion into all aspects of the Institute.**

## SUCCESS INDICATORS

- Implementation of an annual feedback mechanism (i.e. a survey) to capture input from the community, starting in 2024.

- Each research theme strategic growth plan to include a section on inclusivity and plans for fostering an inclusive environment, implemented from 2025 and reviewed annually.

- Retention of all core DERI Professors at the mid-way point

- Creation of mechanisms to showcase diversity, and inspiration leaders devised, and enacted by 2025.

- Develop a plan for targeted engagement with external entities to support diversity initiatives (i.e. sponsored Women in AI events, diversity fellowships or PhD studentships) to be implemented from 2025.

Embed a culture of equity and inclusivity within the Institute. Champion a supportive and **diverse community** through all aspects of operations. Work with the Institute staff and students to understand challenges and proactively seek input to enable continuous improvement.

Become a **leader for diversity** and inclusion within the AI and Data Science field. Foster an environment to support open-minded dialogue and collaborative discussion that centres marginalized voices and engages with the AI and Data Science field both critically and constructively.

Attract and **retain high-calibre Staff** to develop positive working cultures and champion diversity within their programmes. Showcase inspirational leaders and create an inclusive and globally-facing research environment to attract diverse candidates.

Create a supportive research environment to foster professional development. Implement mentorship programmes and celebrate success amongst staff and students to showcase achievements.

Devise targeted initiatives to support the development of diversity in the Institute, and more widely at Queen Mary and in the AI and data science field, positioning the Institute to become a beacon for best practice.

# PRIORITY FIVE

**Develop a financial model to support long-term sustainability to achieve our vision.**

Implement baseline standards and practices to **improve financial return** to the Institute from research grants and initiatives.

Create transparent and motivating personal objectives for the core DERI Professors. Implement metrics to support productivity, aligned with the Institute's vision and overarching strategic goals, and conduct annual reviews on progress to advance success against targets.

Pursue industrial engagement and explore methods for development and enhanced collaboration.

Target **emerging funders,** and development opportunities through philanthropic engagement. Work with Academic Staff to highlight and disseminate the Institute's mission and values.

Develop strategic growth plans for individual research themes to optimise the use of space and ensure continued support for future growth.

Develop and maintain **a robust financial plan**, outlining Institute targets and incorporate metrics to support success against objectives. Obtain input from key stakeholders and work with Academic Staff to support continuous improvement.



## SUCCESS INDICATORS

- Overhead return to average at 70% by year 3 for grants secured.

- Implementation in 2024 of research guidelines to support financial return, reviewed on an annual basis.

- Initiation by the end of 2024 of a regular DERI Management Board to oversee strategic direction and progress to-date.

- By the end of 2028, financial return to the Institute to reflect a surplus on spend against income.

- Personalised objectives for each core DERI Professor to be implemented by 2025, aligned with their strategic growth plans, and monitored annually at appraisals, and revised accordingly.