

Research Scientist (Computer Vision)

Job Title	Research Scientist
Location	Oxford, UK (Hybrid model)
Salary	£45,000 - £65,000pa

Are you passionate about using machine learning to improve healthcare and make a real impact on people's lives? Do you want to join a fast-growing startup at the forefront of AI-driven healthcare solutions? Do you have experience designing, developing, and deploying innovative machine-learning models? If so, we want you to join our team at Optellum!

About Us

Optellum is an AI-driven healthcare company dedicated to revolutionizing early interception and treatment of lung disease, starting with the deadliest: lung cancer. We are a growing team of scientists, engineers, and healthcare professionals working together to make a difference in the fight against lung cancer. Our mission is to ensure every patient with lung cancer is diagnosed at the earliest stage.

We have developed the first FDA-cleared and CE-marked product for diagnostic support of patients with suspicion of lung cancer, using AI applied to medical images. We are working to expand our platform to drive optimal decisions across the lung cancer patient journey and into the early diagnosis and treatment of other deadly diseases of the lungs.

What We Offer:

- Work that is both challenging and rewarding and has a real positive impact on people's lives.
- Fast growth, ownership, and high impact in a growing startup.
- A culture of continuous learning and professional development to help you grow and develop your skills.
- Flexible working hours and location - Hybrid model, with at least two days preferred in our Oxford office.
- Competitive salary, equity, and benefits.
- Great location in Oxford's historical centre: just 5 min walk to train station, 1h to central London

About the Role

We are looking for a talented Research Scientist to help us develop the next generation of machine learning and computer vision models that will be used to support the diagnosis and treatment of lung cancer. In this role, you will work closely with a diverse team of experts in

machine learning, image processing, and medical sciences to create innovative solutions that will help improve cancer care in thousands of hospitals worldwide. Your work will be critical to the success of our AI solutions, ensuring that they are accurate, robust, and clinically relevant.

Key Responsibilities:

- Develop machine learning algorithms that will be integrated into Optellum's products for the early detection, diagnosis and treatment of lung cancer.
- Design and execute experiments to validate the algorithms and iterate on them to improve their accuracy, robustness, and clinical relevance.
- Develop and maintain internal infrastructure and tools that improve our research workflows.
- Collaborate with data engineers and medical experts to develop high-quality datasets for training and testing machine learning models.
- Work with our product team to ensure that machine learning models are integrated effectively into our product and develop product prototypes that can be tested with collaborators and customers.
- Stay up-to-date with the latest developments in machine learning and lung cancer research and apply them to our AI solutions.
- Publish research results in peer-reviewed scientific journals and present them at scientific conferences.
- Communicate your research findings to the Optellum team and external partners.
- Draft and submit invention disclosures for patent filings.
- Manage external collaboration projects.

About You

We are looking for an experienced Machine Learning Research Scientist with a passion for working with data and a proven track record of delivering complex machine-learning solutions. You should have the following:

Essential:

- PhD or equivalent experience in machine learning, computer vision, medical imaging/informatics or a related field.
- Solid programming/coding ability, preferably in Python.
- Expertise in cutting-edge computer vision or machine learning.
- Creativity, scientific curiosity and passion for biomedical topics.
- Strong problem-solving skills and attention to detail.
- Excellent communication skills and ability to work collaboratively with cross-functional teams.
- Eligibility to work in the UK without restrictions as visa sponsorship is not provided.

Desirable:

- Strong PhD from a world-leading research group.
- Experience working with large-scale medical datasets, including medical images (DICOM) and electronic health records.
- Experience in collaborative software development (e.g. in industry or open-source projects).
- Experience working with pathological and genomic data.
- Experience with weakly supervised & unsupervised learning; Natural Language Processing (NLP)
- Experience with scientific computing (e.g. SciPy), deep learning (e.g. PyTorch, TensorFlow), and GPU programming.
- Experience using compute and storage on one or more major cloud platforms (we work with Azure).

Optellum is an Equal Opportunities Employer. We are committed to creating a diverse and inclusive workplace and welcome applications from all qualified candidates regardless of race, gender, disability, religion/belief, sexual orientation, or age.

If you are excited about the opportunity to work with a talented and dedicated team to make a difference in the fight against lung cancer, we would love to hear from you.