



Algorithms Insights Analyst

Once in a career opportunity: Help improve healthcare for society's most vulnerable

Oxehealth: Our Contribution to Healthcare

Oxehealth is a global leader in vision-based patient monitoring and management systems, helping clinicians engineer ever better care. Our pioneering Oxevision software platform enables staff both to plan patient care and to intervene proactively to help patients. We use computer vision, signal processing, big data and machine learning to generate the alerts and reports clinicians, carers and custodians need, seamlessly slotted into their existing workflow.

We hold the world's first medical device certification for the noninvasive measurement of pulse rate & breathing rate. It is comparably accurate to conventional contact medical devices but it is completely contact-free. Oxevision also incorporates leading computer vision techniques to provide timely location-based alerts which alert clinicians to high risk behaviour and generate care reports, without having to invade privacy.

As one medical director remarked, "your technology will change the practice of medicine". Founded by the Head of Engineering at Oxford University, Professor Lionel Tarassenko, we recently won the prestigious Colin Campbell Mitchell Award from the Royal Academy of Engineering, awarded to the group who "made the greatest contribution to the advancement of any field of engineering within the period of the last four years".

With increasing numbers of people living with chronic conditions and growing elderly populations around the world, more and more people need to be looked after by a small group of clinicians and carers – Oxehealth's solutions make this possible.

Since our product launch in 2017, we have built a customer base which includes 1 in 3 UK Mental Health trusts, police forces, the prison service and are developing a strong presence in the Swedish care-home market.

Oxehealth: scaling up

With early commercial deployments hitting their stride in 2019, we were selected for UK Tech Nation's Upscale programme, were invited to No. 10 Downing Street, and won Best HealthTech at the prestigious HSJ awards. Year on year, we aim to increase room numbers three-fold.

In 2020 we've partnered with West London Mental Health Trust for our first hospital-wide deployment at their new Broadmoor Hospital site. We have used the flexibility of our platform and worked closely with NHS partners, to install systems and develop specific functionality to support the care of patients during the Covid pandemic. This has been noted by the CQC in a report on technology usage to support the efforts during the pandemic. We are backed by ambitious, long term investors including IP Group plc and have recently been recognised by Beauhurst analysts as one of the UK's fastest growing healthtech companies.

In 2021 we plan to launch our business in the USA and elsewhere in Europe. To do so, we need to continue solving challenging engineering problems through cutting-edge research. You'll be joining a



well-backed UK business at the start of scaling up its operations around the world; these roles don't come around often.

Your role: increase insight into our high performing algorithms on customer sites

As an Algorithm Insights Analyst, you will measure how our cutting-edge Computer Vision based algorithms are interacting with the environments on our customer sites. Your work will help provide a statistical and visual basis by which the performance of our products can be quantified.

You will find yourself working closely with our Research and Research Operations teams, analysing the factors that lead to algorithmic performance variations across our deployed estate. You will also work closely with our Customer Success team, feeding valuable site-specific insights into ward staff training.

As Oxehealth grows, you will have to grow too; developing scalable methods to analyse data. You will have the flexibility and freedom to innovate and build the tools to be as effective as possible.

Specific responsibilities include:

- Lead the analysis of cloud-based algorithmic data to gain insight into the efficacy of our products on customer sites
- Feed directly into our wider R&D team to help better target their algorithm and configuration development
- Contribute statistical data analysis and visualisation tooling to our scalable research libraries
- Liaise with the Customer Success team to provide more objective data on algorithmic performance on a particular site for more tailored staff engagement and training sessions

You: the qualities and experiences we're looking for

To be a success in this role you will:

- Have grounded skills in statistical and visual data analysis
- Be methodical with excellent attention to detail
- Be resilient. You should not be demotivated if data requires manual annotation to achieve the best result
- Comfortable in a fast-moving environment where priorities may change quickly
- Passionate to help make the lives of patients, nurses and other healthcare professionals better

You will have experience with:

- Python, 2-3 years experience (including Pandas, Matplotlib/Bokeh etc)
- Writing modular, scalable code
- Linux
- Databases (e.g. SQL, InfluxDB, NoSQL)

It is highly beneficial if you have experience of any of the following:

- Apache Spark/Hadoop or similar processing engine
- Data visualisation in other languages (R, Scala, Julia etc)



You are likely to either be a Masters/PhD graduate from a top university or have several years of relevant industry experience and be looking to progress your career to the next level. This role is offered on a full time basis.

Our offer to you: competitive package, learning opportunity, career path

- Competitive salary
- 25 days of annual leave with the ability to purchase more
- Group personal pension plan and life assurance
- Strong growth opportunities (individual and at team's quarterly developmental offsites)
- A flexible working environment - we trust people to manage their time and to focus on results
- Regular opportunities to engage with and understand cutting edge research
- Working in a well-funded scale-up with an entrepreneurial culture and strong team spirit

If you have the ambition, energy and skills needed to be successful in this role and want to be part of a company that is on a journey which will be world changing, please send your CV and cover letter to jobs@oxehealth.com.