



Having the opportunity to work closely with local technology experts to help shape cloud computing services for Genomics in Ireland and to train a cohort of highly skilled graduates is the most exciting aspect of this joint venture

Cathal Seoighe CRT Director NUIG JEDAI IS A MULTI-OMICS DATA ANALYTICS PLATFORM, DESIGNED TO HELP LIFE SCIENCE ORGANISATIONS HARNESS INSIGHT AND UNDERSTANDING FROM THEIR DATA. WE WORK CLOSELY WITH OUR CUSTOMERS TO CREATE A COLLABORATIVE RESEARCH ENVIRONMENT THAT HELPS BIOINFORMATICIANS AND DISCOVERY SCIENTISTS LEVERAGE THE LATEST IN ML AND AI APPLICATIONS AND HARDWARE – ULTIMATELY REDUCING TIME TO INSIGHT.

## WHAT IS JEDAI FOR LIFE SCIENCE?

Our flexible private cloud platform enables cross-collaboration between multiple departments, research centres and even institutions where users can all benefit from shared access to vast datasets to accelerate discoveries in bio-pharmaceutical, consumer goods, healthcare, and agri-science organisations.

These diverse analytical requirements are dependent on highly performant, scalable and often accelerated HPC infrastructure, that supports collaboration in a secure and cost effective manner.

With JedAI, we can help organisations easily migrate to our platform which is designed for multi-omics workloads. JedAI is an AI ready end to end infrastructure orchestration platform optimised for secondary and tertiary data analytics, that can support everything from raw data ingestion to large scale simulation and deep insight.

## WHY JEDAI FOR HPC?

**Public Cloud Bursting:** We don't recommend a purely public cloud strategy for Life Science – simply

## **FEATURES**

Simple Application
Migration with
Containerised Pipelines

Bare Metal and Virtualised
Environments

Secure Collaboration in encrypted multi-tenancy environments

A single GUI based management portal

**FASTQ Compression** 

Containerised Software Repository

3rd party app integration - NVIDIA Clara for Genomics

Al Technologies and frameworks built-in

HPC and HDPA as a Service

Burst to Public Cloud without API integration

## **GET IN TOUCH**

www.define-technology.com +44 (0)20 3034 5550 info@define-technology.com because of the sheer cost of scaling. In an industry where your dataset is continually expanding, your need for resource will continue to grow – and so will the cost of your public cloud requirements.

JedAI includes the ability to burst to public cloud as and when demand dictates – saving you the cost of running your infrastructure solely in a public cloud but affording you the option to extend your system out temporarily should your data processing requirements suddenly increase.

HPC & AI Optimised: Our platform includes hpc-optimised capabilities such as secure dedicated clusters that can support collaborative research, virtualised GPU's for accelerating analytical workloads (eg. Genomics pipelines), cloud-native workstations for high-resolution image analysis as well as the integration of AI technologies such as Kubernetes, and Spark/Hail for GATK analysis.

**Genomics Software Repository:** Our built-in software repository is a portfolio of thousands of containerised life-science frameworks, applications and pipeline analytics tools that come pre-integrated and ready to run.

**Reduced Storage Costs:** We can help to reduce your storage costs using secure, transparent compression techniques that decreases the size of your datasets and transfer times by up to 90% withing compromising data quality.

With JedAI, you can enjoy cloud-like capabilities with the security of your own internal infrastructure and leverage Public Cloud only when you need to. We support the full stack from infrastructure provisioning, right through to your HPC environment with integrated applications for running all of your life science workloads. Our platform can dynamically adapt and evolve depending on your changing user requirements. Future-proof your life science infrastructure with JedAI.

If you are interested in simplified IT management, scalable resources, accelerated workloads and faster time to insight, talk to us about JedAI today.