lifebit

Create the future of precision medicine with Lifebit

Join the team committed to creating a world where access to biomedical data will never again be an obstacle for curing diseases.
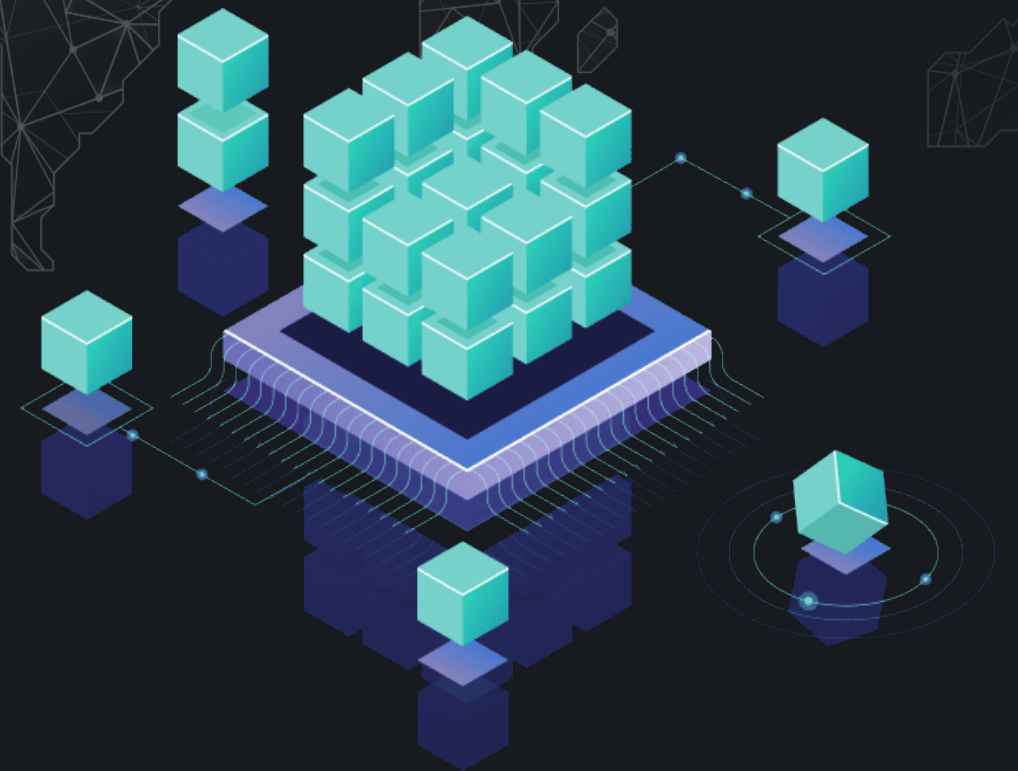
Our mission

Lifebit empowers therapeutic leaders and pioneers in precision medicine on how to access and analyse siloed biomedical data.

Generating large amounts of biomedical data has become relatively straightforward. The challenge now is how organisations can access and utilise data stored across thousands of disconnected locations. It is painfully difficult or impossible today.

Lifebit has created a patented technology that enables researchers to run analyses on multiple, distributed datasets in-situ and avoid risky movement of highly-sensitive data.

> **"All biomedical data that can be used to save lives should be used."**
>
> Dr. Maria Chatzou Dunford, Chief Executive Officer

Our values

These are some of the values that we live by as a company. We work by them, too. We're building technology that we believe in, knowing that there is real value in empowering researchers with the tools they need to provide direct patient benefits and cure diseases.

Impact
We believe in driving value from the things we do and the team around us to achieve the most impact-driven results.

Growth
We support healthy, constructive debate that advances our thinking and planning and drives us forward as an organisation and individuals.

Fun
We are cheerful and passionate about the work we do. It's a marathon, not a sprint, so we value the journey and celebrate successes.

Ownership
We believe in leadership as an action, not a position. As one team, we pride ourselves on what we deliver together and learn from our outcomes.

Delivery
Going above and beyond with a careful eye on operational excellence. The biggest outcome with the least effort.

An inclusive environment for all the ones that stand out

Diversity, engagement and belonging are central to our values. We're dedicated to hiring diverse talent, and we ensure that everyone at Lifebit is treated with respect and support.
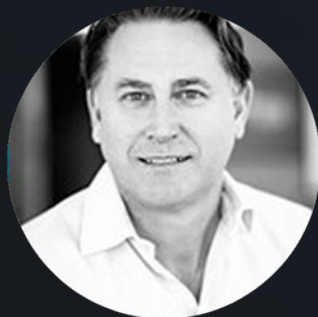
![lifebit]

Leadership team

Dr. Maria C. Dunford
CEO & Founder

Pablo Prieto Barja, PhD
CTO & Founder

Noël Sebastian Somdalen
Chief of Staff

Martin Hobbs
Legal Counsel

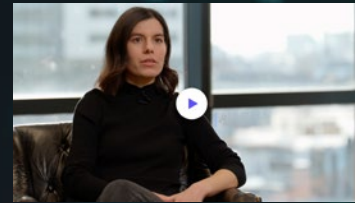**Alejandra Díaz Murillo**
People & Talent Director
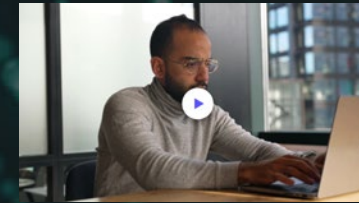
Ante Patrk
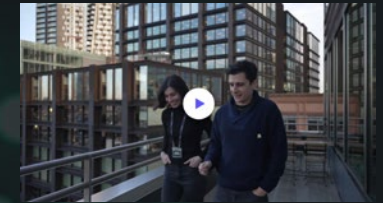VP of Finance

Video explainers: Working at Lifebit

Meet some of the Lifebit team as they explain Lifebit's mission, tech stack, diversity and how Lifebit accelerates medical research.
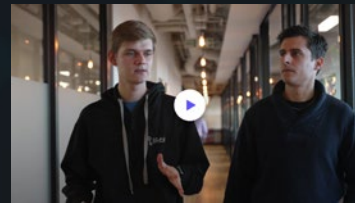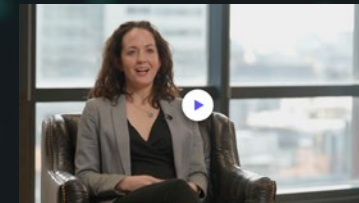

Christina Chatzipantsiou
Lead Solutions Architect

Diego Manjerres
Tech Lead

Diogo Silva
Cloud & Software Engineer

Vlad Dembrovskyi
Product Owner

Lauren White
Client Success Director

Ahead of the curve

Our technology is unmatched, and momentum is on our side - but we need an exceptionally strong team to help boost Lifebit to incredible new heights. The different teams' stack includes:
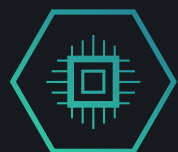
Backend
NodeJS, TypeScript, MongoDB

Frontend
React & React ecosystem, TypeScript

Infrastructure
Terraform, Docker, Kubernetes, AWS

Machine Learning
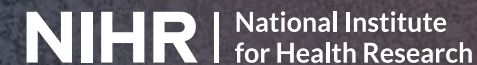Python, Pandas, Sklearn, Tezvnsorflow

Bioinformatics
Nextflow, Conda, Python, R, Bash, Docker, Singularityz

Impacting globally

We are trusted to deliver game-changing results
by both private and public institutions.

Job description

Senior Backend Engineer

Description

At Lifebit, we carve our own path. Trusted by Governments and world-leading pharma institutions and funded with over $70m we are on a mission to harness the power of connected data and bring precision medicine to life globally. The key to saving human lives is providing researchers across the globe with the right data to develop more precise drugs faster.

Generating large amounts of biomedical data has become relatively straightforward. The challenge now is finding, accessing, and analysing this sensitive data stored across thousands of disconnected locations. It is frustrating and painfully difficult for researchers.

Lifebit has created a patented, federated technology that brings analysis and computation to where data resides. This enables researchers to run analyses on multiple, distributed datasets in-situ, avoiding the risky movement of highly sensitive data.

Lifebit powers pioneers in national precision medicine such as Genomics England (UK Government) and the Hong Kong Genome Project and guides them on how to make their valuable data usable securely. Biotech and pharma leaders like Boehringer Ingelheim turn to Lifebit to connect them to this otherwise locked up data to obtain novel therapeutic insights.

Our technology is unmatched, and momentum is on our side - but we need an exceptionally strong team to help boost Lifebit to incredible new heights.

The different teams' stack includes:

• **Backend:** NodeJS, TypeScript, MongoDB

• **Infrastructure:** Terraform, Docker, Kubernetes, AWS

• **Frontend:** React & React ecosystem, TypeScript

• **Machine Learning:** Python, Pandas, Sklearn, Tensorflow

• **Bioinformatics:** Nextflow, Conda, Python, R, Bash, Docker, Singularity

As a Senior Backend Engineer in our team, you will:

• Take a leading role in defining software engineering processes and ways of working, not just coding

• Design and lead backend architecture implementation

• Contribute to features across the entire life cycle, from inception to deployment in production

• Navigate in new code and make sense through what you find

• Pick up new technologies and frameworks that suit the needs of products and users

• Demonstrate an interest in working with best practices and principles while

Job description

contributing to them, to keep high quality standards and keep hell far away

- Work towards production deployment rapidly, be able to scale and to be monitored easily
- Enable feature improvements and delivery to be updated on a daily basis

Requirements

The role requirements below are just an indication of what we're looking for - sometimes the perfect candidate is far more or less experienced than we anticipated. If you think that might be your case, please reach out and let us know!

You should have a good understanding of best practices of web development and be able to apply them in web development (ES6, JS). Specifically, you have:

- NodeJS and TypeScript experience
- API design and implementation experience
- Understanding of interactions and communication between services at scale (sockets, polling, monitoring)
- Familiarity with TDD
- Experience with NoSQL databases
- Used communication services with message brokers (RabbitMq, Kafka, ...)
- Experience with services ingesting high volume of transactions and analytics

- A mindset ready to firefight against issues in real time
- Experience with Docker, AWS, GCP and ops over cloud (nice to have)
- Fluency in English
- Good understanding of genomics and epidemiological data (nice to have)

Benefits

- Competitive salary and generous stock options
- 25 days of annual leave plus the usual public holidays
- Monthly team activities
- Conferences, events, and training resources (Data science, AI, cloud, any tech stack, painting, origami, you pick!) - we offer €1,000 a year to each person for personal development)
- An international and diverse team
- Exposure to problems and applications in the cloud, data analysis, ML, life sciences, and big data fields
- Flexible working during summer

About

Lifebit is on the cutting edge of the biotechnology revolution.

Job description

In September 2021, we raised a $60 million Series B funding round, led by global investment firm Tiger Global Management. Existing investors Eurazeo, Pentech Ventures, and Beacon Capital also participated.

Despite the rapid growth of biomedical data in recent years – estimates suggest that by 2025, 500 million human genomes will have been sequenced, amassing more data than YouTube and Twitter combined – only a fraction of it is being utilised for drug discovery and precision medicine. This is because the data needed for such vital work is often inaccessible and unusable. Whether that's down to governance, regulations, privacy and security concerns, or inadequate technology. So much so, the World EconomicForum states that 97% of all data produced by hospitals each year goes untouched.

Lifebit's federated approach

Lifebit's pioneering federated technology solves this problem. It not only makes vital biomedical data findable, and usable, but it makes it actionable and highly secure. Instead of moving data around, Lifebit builds enterprise data platforms for use, in-house, by organisations with complex and sensitive biomedical datasets. It brings the researchers' analysis and computation to where the data resides, thus removing the inherent risks involved with moving data between systems, and the data is then governed by each individual organisation's existing, high-level security, anonymity and regulatory protocols.

Through Lifebit's suite of AI-powered, end-to-end software solutions, these platforms are also able to provide faster data insights, accelerate drug discovery pipelines, and improve clinical trials success. All for the benefit of patients globally and all while

making Lifebit's vision to cure diseases by unlocking access to the world's data a reality.

This approach has seen Lifebit acquire numerous high-profile clients across the public and private sectors including a recent contract to support the implementation of Hong Kong's first population-scale genome sequencing initiative, the Hong Kong Genome Project, as well as a long-term AI-partnership with German pharma giant Boehringer Ingelheim. Lifebit also won the UK Government contract to power Genomics England with its 135,000-strong cohort of cancer, rare disease and COVID-19 patient data – a project largely considered to be the global pioneer in population genomics.

Please check out some of the open-source projects our team has worked on:

Flowcraft: https://github.com/assemblerflow/flowcraft

Trifusion: https://github.com/ODiogoSilva/TriFusion

Kivy: https://github.com/kivy/kivy

pATLAS: https://github.com/tiagofilipe12/pATLAS

bionode-watermill: https://github.com/bionode/bionode-watermill

YLOViZ Online: https://github.com/bfrgoncalves/Online-PhyloViZ

INNUENDO: https://github.com/bfrgoncalves/INNUENDO_REST_AP I
https://innuendo.readthedocs.io/en/latest/

lifebit

Perks and benefits

There's life at work and life outside of work. We want everyone to be healthy, travel often, get time to give back, and have the financial resources and support they need.

Competitive salary

Flexible vacation policy

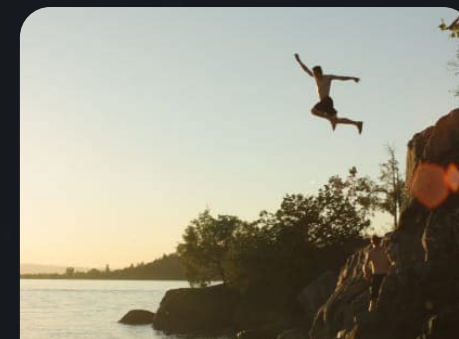**Ability to work fully remote from anywhere**

Employee bonuses

Continuous learning and development

Working with the most unbelievable, awesome & fun people

We live "Fun"

From company retreats to happy hours and movie nights, we know how to take breaks inside and outside the office. Who knows? You may end up on a crazy trip with us in the process!

lifebit

Remote-first and locations

We are a remote-first company, working collaboratively from our office locations with team members located in their home countries.

Offices

London

New York

Singapore

Lisbon

Remote

UK	Australia
Spain	USA
Portugal	Poland
Greece	Ireland
Switzerland	Canada
Germany	Hong Kong
Italy	Netherlands
India	Any location...