Job title: **Senior Software Engineer**

Reports to: **Chief Executive Officer**

Salary: **$120k - $160k**

Employment: **Full or part time, start date 1 Sept 2021 (flexible)**

How to apply: Please send a CV and cover letter to lab@nucleotrace.tech.

About Nucleotrace

Nucleotrace is a start-up out of the University of Cambridge, UK, and is now based in Collingwood, Melbourne. Nucleotrace has developed next generation DNA barcoding technology that monitors the movement and use of products over their entire lifecycle. We utilise several advanced biochemical techniques including isothermal RPA amplification chemistry, Oxford Nanopore DNA sequencing, and advanced soft-encoding approaches to write information into synthetic DNA. Together, the Nucleotrace platform allows a product's history to be rapidly recovered and validated at any point in the product lifecycle.

Nucleotrace technology has widespread applications for pharmaceutical organisations and defence forces. In June 2019, Nucleotrace was accepted onto the US FDA and EU EMA Emerging Technologies Programs. In March 2020, Nucleotrace was awarded a contract with a large Commonwealth Government department to track specialised products. For more information on potential applications, please see our [Pharmaceuticals Explainer Animation](#). Nucleotrace is an equal opportunity employer.

We are a small dynamic team with diverse backgrounds biotech, information theory, software engineering and business management. This position will provide the successful candidate exposure to the fast-paced world of a biotechnology start-up, including access to cutting edge technology and ongoing projects with industry leaders. We celebrate diversity and are committed to creating an inclusive environment for all employees as we continue to expand.

Position

Senior software engineer / project lead with management experience. Nucleotrace has been commissioned to build a web-based data management platform for our DNA tracking technology. The successful candidate will be instrumental in the initial design and delivery of our platform. This is both a technical and management role that requires interaction with R&D teams, external software developers, and the client. They will additionally take a technical lead on more creative projects and demonstrate their ingenuity for data visualisation through the creation of an effective and elegant final product.

Requirements and expertise

- Bachelor's degree in Software Engineering or Computer Science with demonstrated academic achievement and an established portfolio of work.
- At least three years' experience in complex application development covering the areas of web, mobile, cloud and database development:
    - Proficiency with modern web technologies, preferably Javascript and related libraries (e.g. Node, Typescript, React, Angular, etc.) and experience working with controlled/legacy browser environments.
    - Experience with mobile app development (native and / or cross platform) is favourable (such as Swift, React Native or Java)
    - Experience with modern databases such as Postgres, MySQL, Redshift, etc.
    - Experience with modern cloud-hosting platforms, designing and implementing deployment pipelines, leveraging git alongside other cloud technologies, and automated testing frameworks.
    - Experience architecting and implementing API-driven solutions (knowledge of API orchestration and management techniques a bonus).
- Experience working in agile, LEAN or other progressive delivery environment.
- Australian, UK, US, NZ or Canadian citizenship. Nucleotrace's research partners require that all of our employees are from Five Eyes countries and obtain relevant security clearances.

Responsibilities

- Delivery of MVP software platform to the highest possible standard.
- Support the CEO in a 'product-owner' role to manage client expectation and software development work. Translation of client brief into tangible work.
- Take a lead role on software application design, data visualisation and user experience.
- Interact with the Nucleotrace biotech and information theory teams to integrate core components of the full MVP platform (software application, DNA encoding systems and hardware).

Important attributes

- A client-facing technologist with considered opinions and expertise, who can inspire colleagues and clients.
- Offer strategic and technical direction, and be at ease discussing new and emerging technologies with people of all levels.
- Be forward-thinking, keeping ahead of new trends and technologies, finding ways of transferring new ideas and knowledge into practical work.
- Be an effective hands-on developer, delivering work to a high standard.
- Be able to work quickly and flexibly with people of all disciplines.
- Attention to detail and the ability to communicate clearly.

Business development

- Support for relevant business development activities including client presentations and report drafting as required.