

Project Title

Evaluating Secure Genomic Data Platforms with Personalised Dynamic Consent

Overview

This research project forms a critical part of the broader initiative "[Securing the Future: Protecting Genomic Data in an Age of Information.](#)"

It focuses on identifying and evaluating existing secure platforms and prototypes that implement personalised dynamic consent for genomic data sharing. The study will assess platforms based on compliance with key regulatory frameworks (Privacy Act, GDPR, HIPAA), state-of-the-art security technologies, user control features, scalability, and usability.

Benchmarking will be conducted through simulations, case studies, and user feedback to compare performance and inform best practices for secure, ethical genomic data governance in Australia.

Student Role

The student will assist in conducting a comprehensive review of available genomic data platforms, applying defined inclusion criteria to shortlist viable candidates. They will participate in benchmarking these platforms through literature review, simulations, case study analysis, and collecting user experience data. The role involves synthesizing findings into comparative reports to support the development of ethical and secure genomic data governance frameworks. The student will receive ongoing supervision and guidance, with their work contributing directly to shaping policy-relevant recommendations.

Prerequisites

Ideal for third- or fourth-year students from disciplines such as **law, IT, bioinformatics, public health, bioethics, digital health, or data science**. Strong **research and writing skills** are essential. An interest in **privacy, data governance, policy, or genomics** is highly valued. Familiarity with regulatory frameworks (e.g. GDPR, HIPAA) is a plus.

What You'll Gain

- Hands-on experience evaluating secure data platforms and privacy technologies
- Understanding of dynamic consent and user-centric data governance models
- Skills in benchmarking, simulation, and usability assessment methodologies
- Opportunity to contribute to real-world genomic data security and ethics initiatives