



Hyperbloom: Driving Innovation in Biotech with AI

Status

Shared



Hyperbloom is a consulting company and talent agency that builds AI and data-driven software platforms to improve quality of life. We provide technical consulting and staffing services at the intersection of *AI engineering, data science, and cloud computing*. Hyperbloom's talent community leverages these emerging technologies to help our clients solve society's greatest challenges across industries like healthcare, biotech, and biopharma.

Consulting solutions

Our team of experts drives innovation, optimizes processes, and accelerates scientific advancements in these critical sectors by helping deliver projects like:

- 1. Clinical Trial Data Analysis:** Applying AI analytics to clinical trial data to identify patterns, optimize patient recruitment, and enhance trial outcomes.

2. **Regulatory Compliance Solutions:** Developing AI tools for regulatory compliance monitoring, reporting, and ensuring adherence to industry guidelines.
3. **Precision Medicine Algorithms:** Building AI models for precision medicine initiatives, enabling personalized treatment strategies based on individual patient data.

Staffing services



We staff all roles required to build AI and data products.

1. **Fractional Chief Technology, Data, and AI Officers:** Our executive leaders fill in gaps where needed and own strategic initiatives until business objectives are met. They have a deep technical understanding of AI and can work cross-functionally. AI itself is not a product or a business. Rather, it is a foundational technology that can help existing lines of business and create new products or lines of business. We are leaders who can manage intrapreneurial initiatives to increase your odds of successfully creating innovations for your industry.
2. **Machine Learning Engineers:** Our ML engineers build large-scale systems that ingest massive data sets and use them to train algorithms that can learn cognitive tasks and generate useful insights and predictions. Our ML engineers manage the entire data science pipeline, including sourcing and preparing data, building and training models, and deploying models to production.
3. **Data Governance Managers:** Our data governance managers establish and maintain policies and procedures related to the storage and distribution of data within an organization, including ensuring security and compliance. For healthcare and life science organizations, they can help meet global regulatory requirements, data protection laws (CCPA, GDPR, and HIPAA), and privacy frameworks (like FAIR). They make sure software systems are interoperable by applying standards such as CDISC, SDTM, ADaM, and HL7.

Customer stories



These are some of our favorite projects related to potential solutions we could build for your organization.

- 1. Clinical data governance and disaster recovery planning:** Hyperbloom led disaster recovery planning and architected automated data governance solutions for clinical trial software. It helped over 10,000 research sites in 45 countries manage their documents, data, and workflows. The platform provides remote access so sponsors and contract research organizations (CROs) can collaborate with their sites worldwide. Users performed 5.5 million remote monitoring activities each month. Our work helped mitigate the risk of security and privacy breaches due to inadequate data protection and improper use of sensitive data. We performed a business impact analysis, developed a disaster recovery plan, and established access controls.
- 2. Bioinformatics data platform design and development:** Hyperbloom contributes to COINSTAC, an open-source software suite that fosters collaborative research using neuroimaging and genomics data. It removes large barriers to traditional data-centric collaboration approaches. It enables groups of users to run common analyses on their machines over their datasets easily. The results of these analyses are synchronized to the cloud and undergo aggregate analysis processes using all contributor data. Decentralized pipelines allow for distributed, iterative, and feature-rich analyses, opening new and exciting capabilities for collaborative computation. It also offers data anonymity through differential privacy algorithms, so members do not need to fear PHI traceback.
- 3. Clinical trial data protection and document sharing:** Hyperbloom applied blockchain technology to securely and privately exchange data. Using smart contracts, we designed a system to facilitate and verify a data life cycle. The life cycle identified, tracked, and secured data. Our architects designed it to meet global regulatory requirements, data protection laws (CCPA, GDPR, and HIPAA), and privacy frameworks (like FAIR). We ensured it was interoperable by applying CDISC, SDTM, ADaM, and HL7 standards.

Why work with Hyperbloom?



What differentiates Hyperbloom from other talent agencies and consulting organizations?

1. Our on-demand talent and consulting services offer a fast, agile way for companies to obtain the expertise they need while remaining flexible with capacity and cost.
2. We capture growth opportunities and fill critical gaps with experienced interim leaders.
3. We value emotional and interpersonal skills as much as technical and business skills. If you work with Hyperbloom, you can expect our consultants to bring warmth to every engagement.

Our vision and values



Our healthcare and life science work is intentionally focused on creating a world without disease where mental health disorders are viewed as forms of diversity instead of as problems to solve. We envision a burgeoning society, fully inclusive of neurodiverse people, with accessible and personalized healthcare and workplaces the norm. We all have everything we need, live as long as we want, remain physically strong forever, and feel emotionally safe everywhere.

We are...

- *Equitable*: the wealth, business, and power we create are fairly distributed and easily accessible by our community. We use our power to empower others.
- *Healthy*: improving our physical health improves our mental health, which improves everything in our work and life. Our bodies are the vehicle for our brains and their nervous system. From a healthy body, a healthy and happy mind emerges.
- *Caring*: the most valuable use of our time is building new and warm connections with those we love. We will always put people and the planet we live on over profit.

- *Empirical*: we expand our knowledge through the scientific method and trust research performed by deep subject matter experts. We never distort scientific facts to fit our beliefs and maintain a coherent understanding of the universe.
- *Focused*: we are unrelentingly focused on what is wildly important and extremely meaningful.

Thank you



The team at Hyperbloom is excited to be a part of this journey with you!