SIMFORM
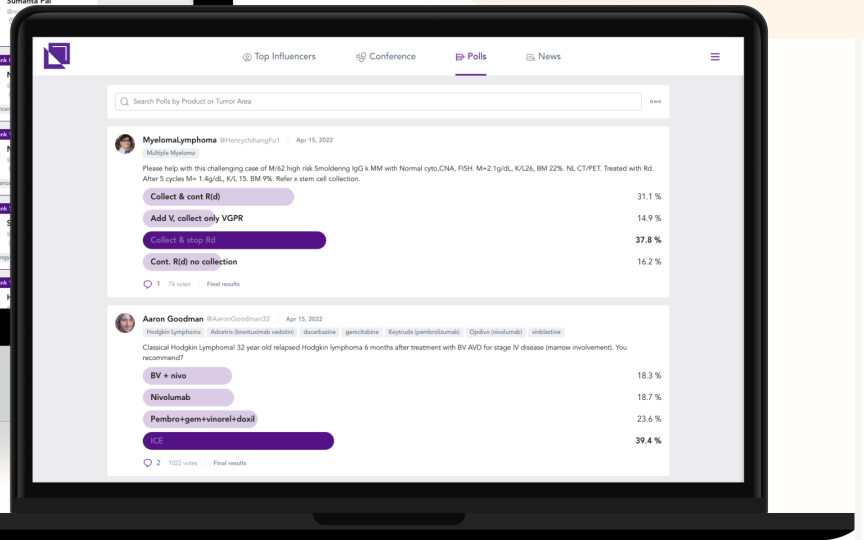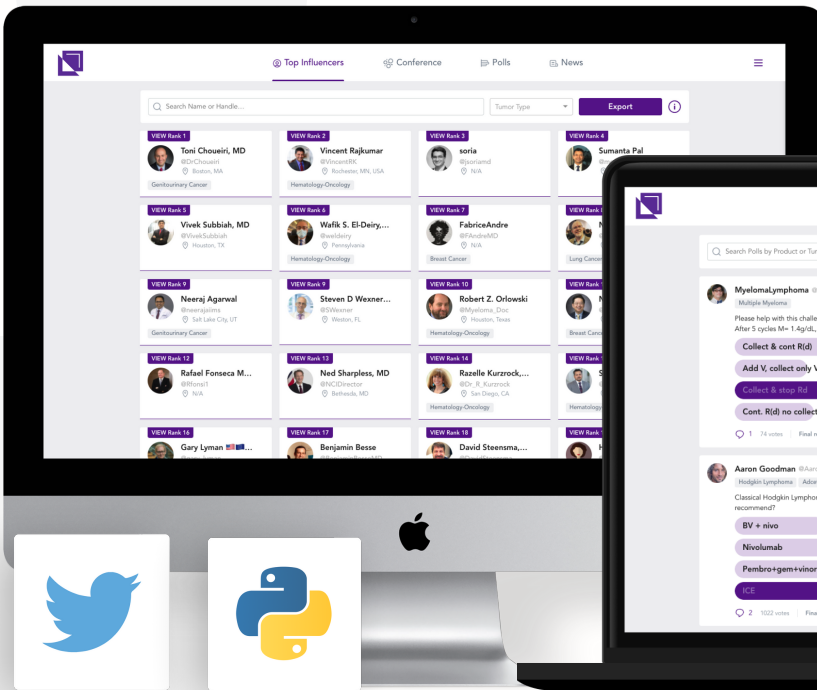
Case Study

Tweets driven market intelligence solution for pharma industry

→

Build centralized digital platform which curates views of Key Opinion Leaders in the health care and life science domain from 25,000 sources and distills the most relevant findings using concise reports

Services Used

- Managed Engineering Teams
- Progressive Web App Development
- API Integration And System Integration
- Micro Services Architecture And Development
- CI/CD Implementation And Management

Technology Stack

AWS Lambda AWS RDS Python - Django Ruby on Rails

PostgreSQL AWS ECS Angular PHP

Challenges

Capturing and analysing millions of raw tweet data of KOLs based on multiple factors and sentiments to provide real-time insights and time-saving analysis

Curating highly relevant tweet data

Implementing data-retrieval mechanism to retrieve millions of tweets of 1000s of Influencers by using certain keywords or hashtags

Implementing scalable microservices architecture

Designing Micro-services based architecture to **translate millions of Tweet data into desired structure** to enable strategic decision making
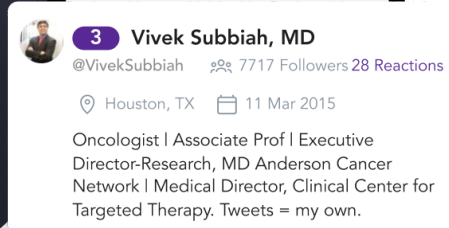
Optimizing database performance

Performance tuning of constantly growing database of Tweet data with scalability and backup and restore strategy in mind
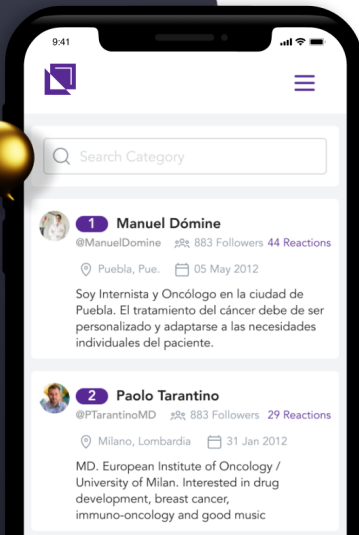
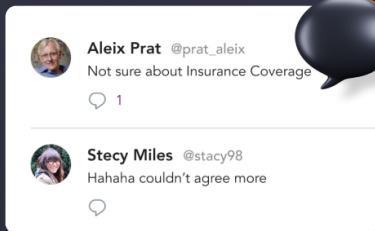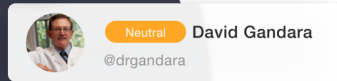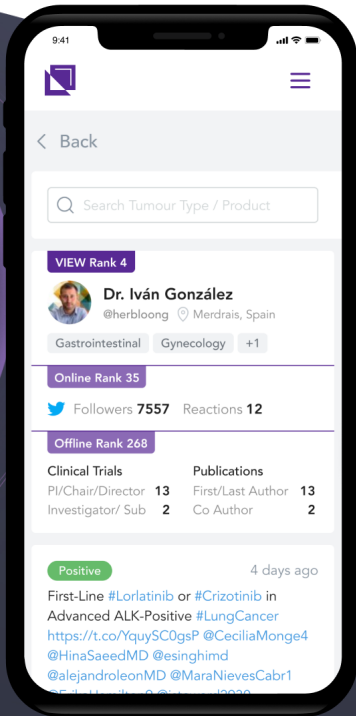### Data sceurity for cross functional team

Protecting the data, code, or other confidential information in remote working environment for cross functional team

Our Solution

Adopting the agile methodologies to achieve the given timeline and furnishing **real-time analytical solutions by churning big data** to achieve the desired results has been the USP of the solutions delivered.

Our team successfully overcame the challenge to keep the data up-to-date, real-time as a huge chunk of data was being captured by the system at regular intervals via APIs.

Our team coherently optimized the database for security and reduced response time that was a critical aspect to seamlessly functioning of the solution.

Simform provided us with three full stack developers. We are quite happy with the quality of work and results.

CTO

Our Solution

1

Integrated API to capture data at regular intervals

Integrated Twitter Historical PowerTrack API that provides access to the entire historical archive of public Twitter data. We designed system to **capture this data in batches of 500 tweets every 2 hour** keeping the data up to date.

2

Optimized database for reduced response time

Optimized PostgreSQL database hosted on AWS RDS to reduce query response time for displaying KOL feed data through proper indexing, avoiding correlated sub-queries, and wise use of temp tables.

3

Distinguishing tweets from retweets through script

Utilised AWS lambda for running **Python scripts that automatically filters original tweets** from retweet and reply data to derive the sentiments of KOLs towards any clinical research work

4

An added layer of security and role based access in Coding environment

Provided secure coding environment by following certain practices using Bcrypt when storing passwords, Filter sensitive information from logs, Grant the least privileges required.

We are
Simform

Simform is a leading digital product engineering company. Over the last decade, our world-class tech teams have refined engineering practices for Fortune 1000 companies and successful startups.

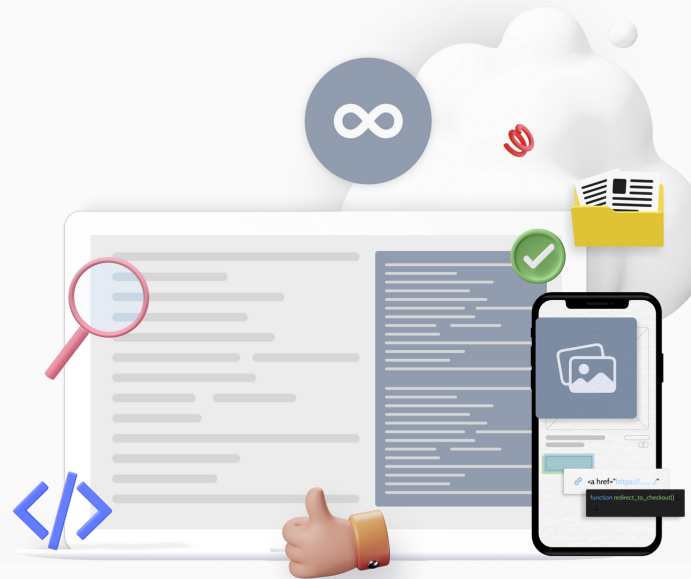Let's get in touch to extend your tech team with top talent!

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Cloud Native Development and Modernization

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Quality Engineering and Testing

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