

Transition from Academia to Industry

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Genentech



A Member of the Roche Group

Genentech is a leading biotechnology company dedicated to pursuing groundbreaking science to discover and develop medicines for people with serious and life-threatening diseases.

Genentech's focused areas:



ONCOLOGY & CANCER
IMMUNOTHERAPY



IMMUNOLOGY



INFECTIOUS DISEASES



NEUROSCIENCE



OPHTHALMOLOGY



RARE DISEASES



RESEARCH TECHNOLOGIES



DIGITAL & PERSONALIZED
HEALTHCARE

Total 47 medicines and products on the market

Bioocology: 20

Immunology and ophthalmology: 7

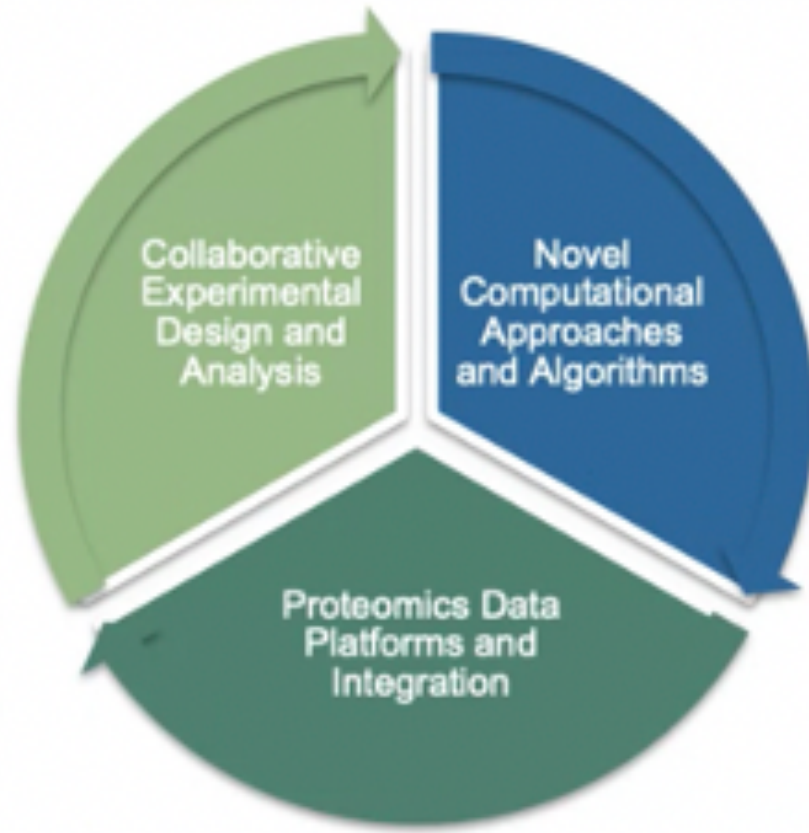
Metabolism & Primary care: 1

Neurology: 4

Virology & Specialty care: 6

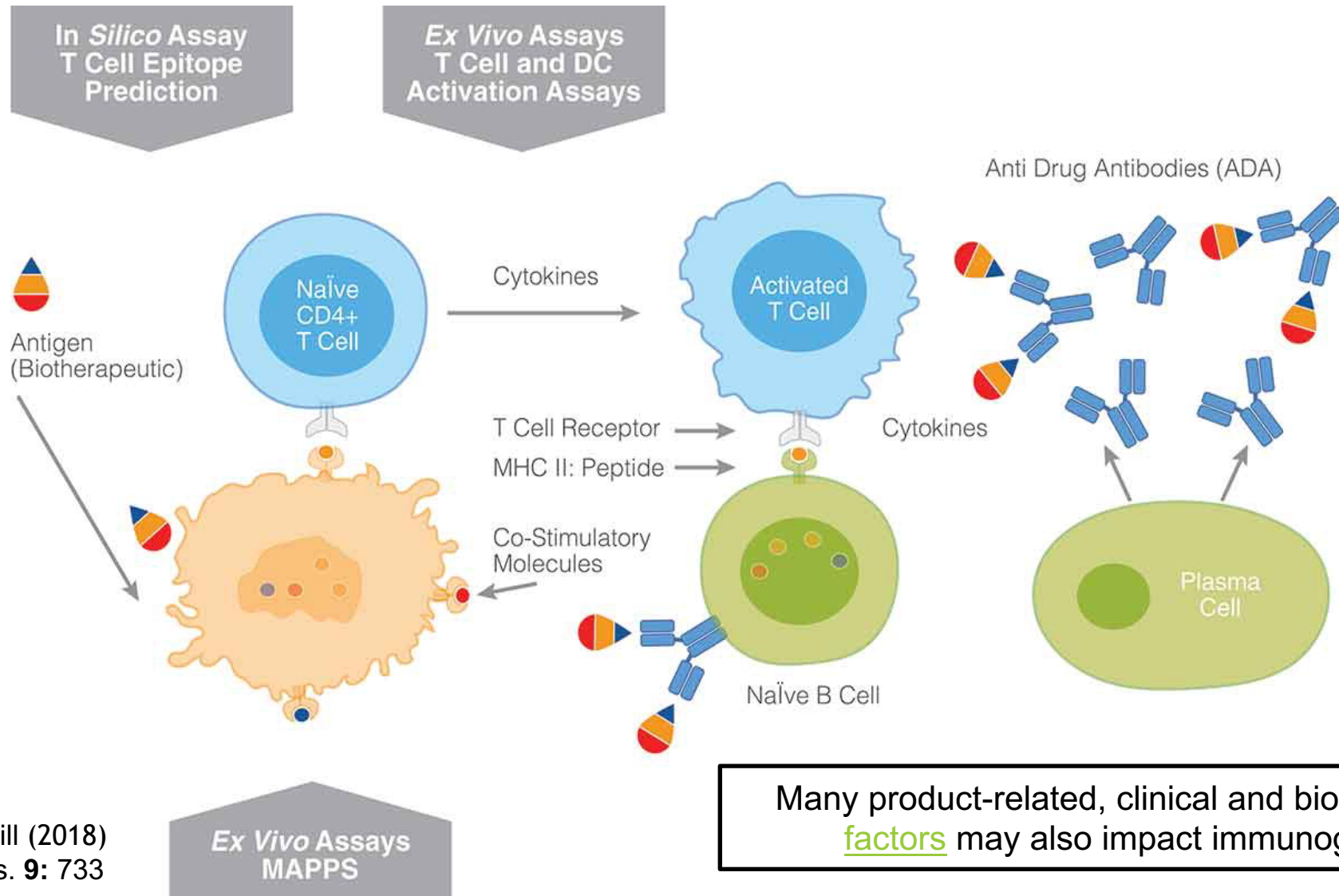
Other products: 9

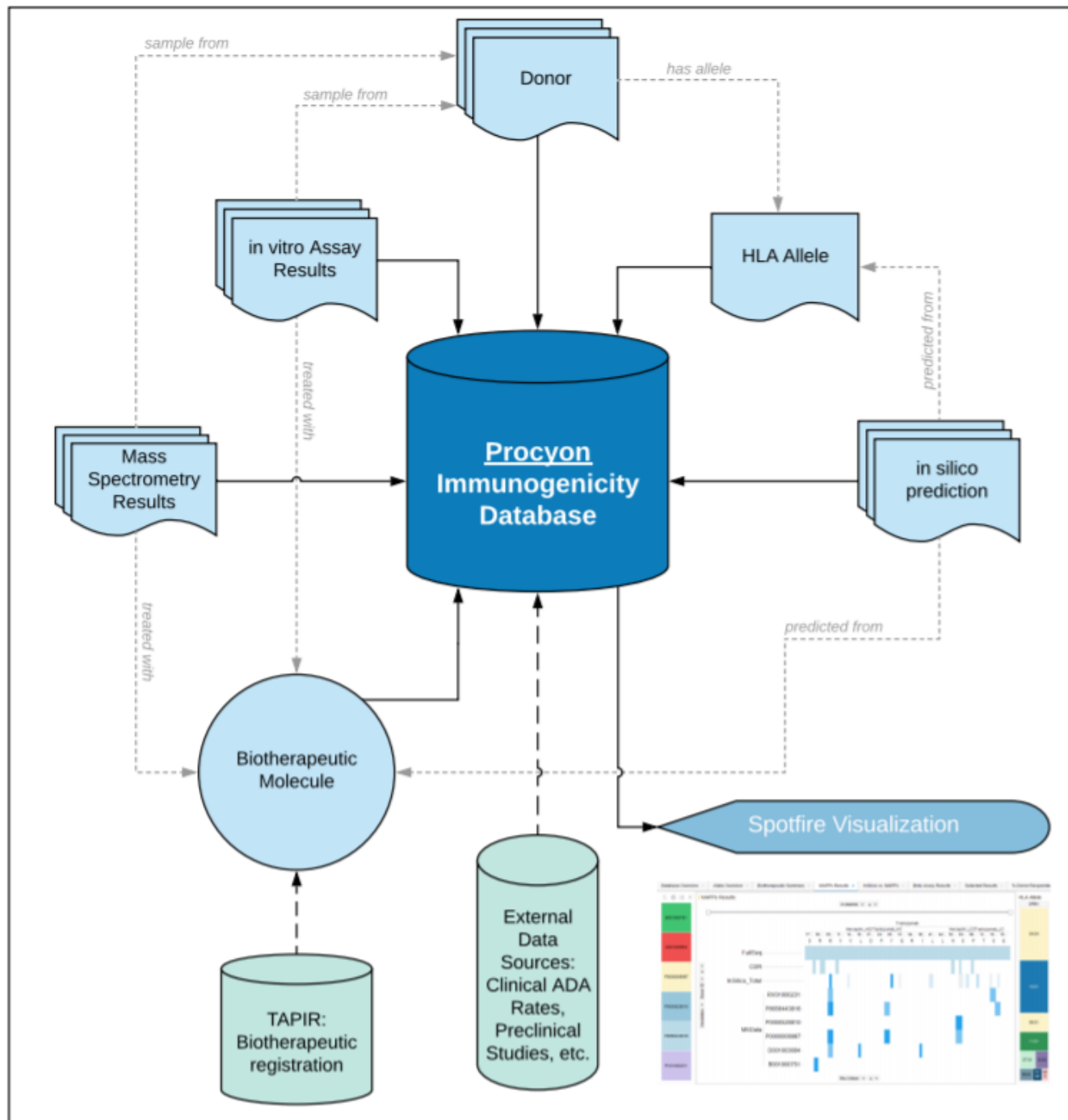
My role: Bioinformatics software engineer
in Proteomics, Lipidomics and Next Generation Sequencing



Example project - Preclinical immunogenicity risk-ranking

Mechanistic model of ADA generation





About Me

Undergrad in Biotechnoly at Xiamen University in China

Ph.D. in Developmental Biology at Rutgers University

M.S. in Computer Science at Rutgers University

Insight health data science fellow

Bioinformatics Associate in Evotec & Genentech

Bioinformatics Software engineer in Genentech

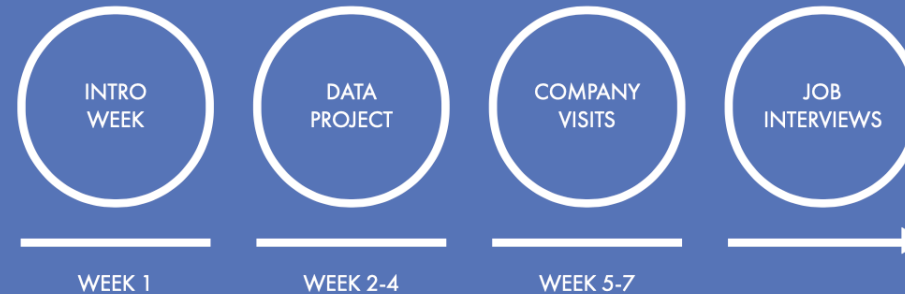
INSIGHT



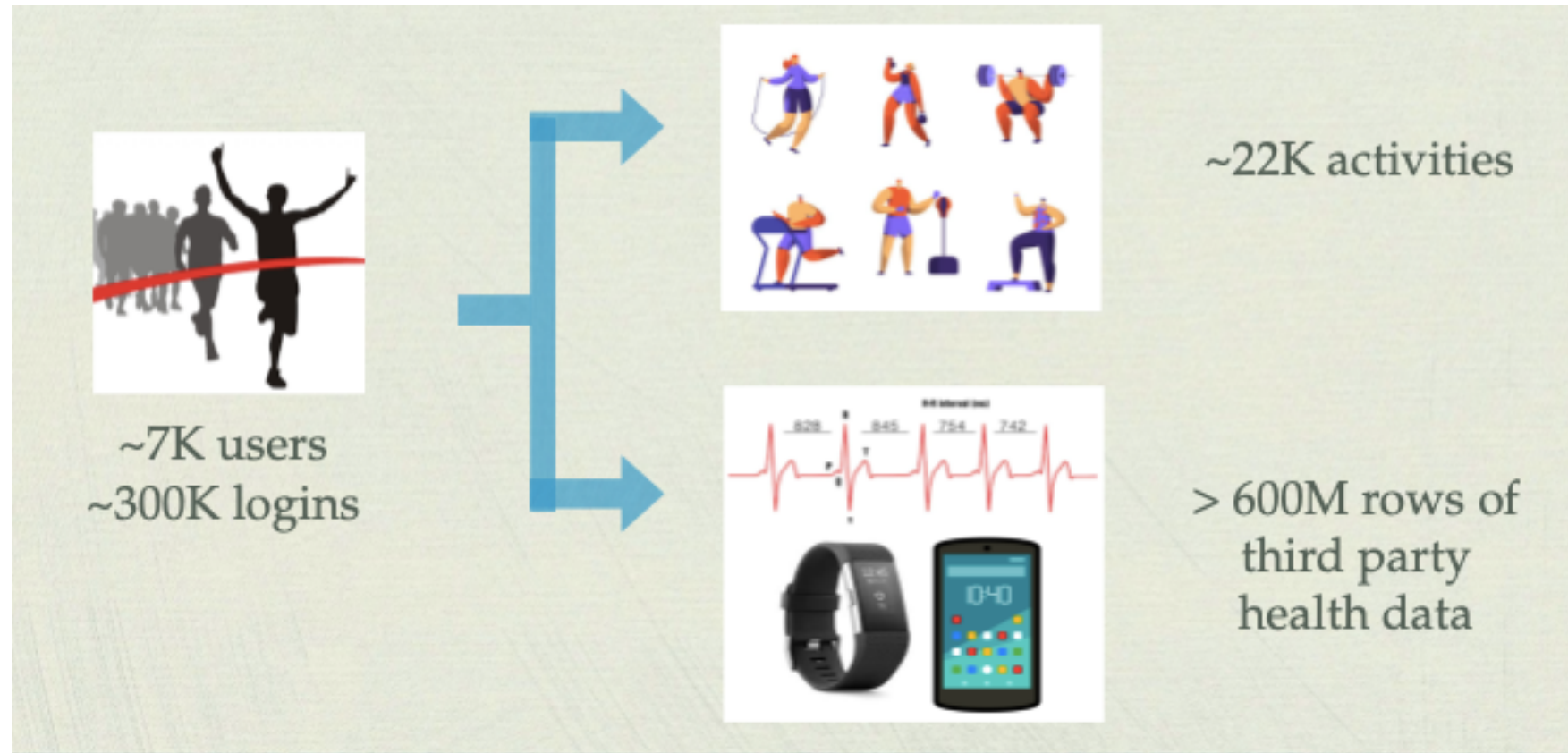
Health Data Science Fellow

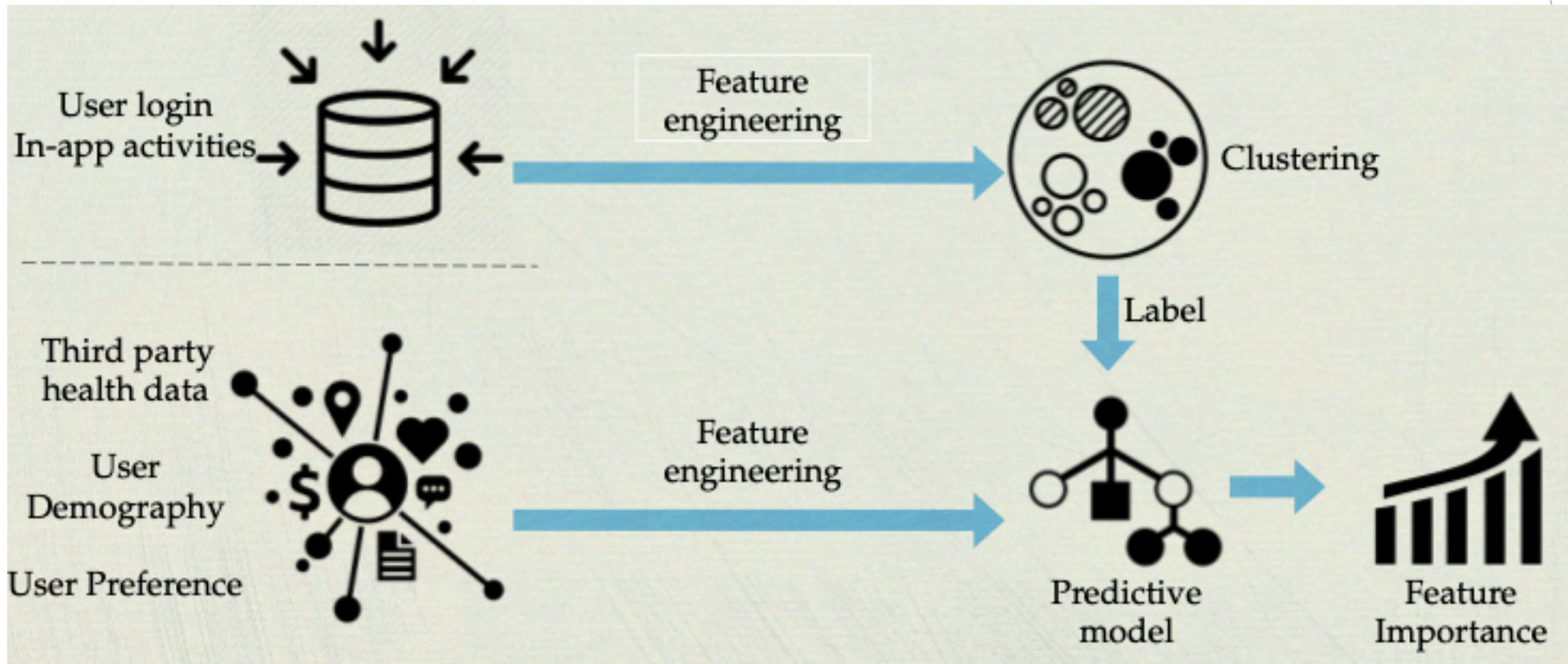
7 weeks intensive program

INSIGHT IN A NUTSHELL



Insight project - Segment users and predict user activities for a health app





Job searching:

1. Find the positions that interests you most

Talk to people in that position

Read job description

Read people's post

Prepare ahead

2. Networking

University resources

Alumni center

Linkedin

3. Write your CV

One page

Consider removing publications

Adjust for each company

Choose a clean resume format

LaTeX, Overleaf

4. Apply

Dream companys

Linkedin

Indeed

5. Interview

Behavior questions

Technical questions

Demo projects: within 10 minutes

Take-home assignment: the candidate is given a dataset and is asked to do “something” within normally a week

Technical questions:

SQL: <https://www.w3schools.com/sql/default.asp>

Coding: <https://leetcode.com/>

Statistics/Probability

Machine learning: Linear/Logistics Regression, Decision Trees, Ensemble Methods

Explaining your research and other projects and how that might be relevant experience

Job openings:

Virtual Intern:

<https://careers.gene.com/us/en/job/GENEUS202201104286EXTERNALENUS/>
Intern-Virtual-gRED-Microchemistry-Proteomics-and-Lipidomics

Senior Research software engineer:

<https://careers.gene.com/us/en/job/GENEUS202110130017EXTERNALENUS/>
Senior-Research-Software-Engineer

Senior Bioinformatics Scientist:

<https://careers.gene.com/us/en/job/GENEUS202110130016EXTERNALENUS/>
Senior-Bioinformatics-Scientist-Proteomics

Thank you !