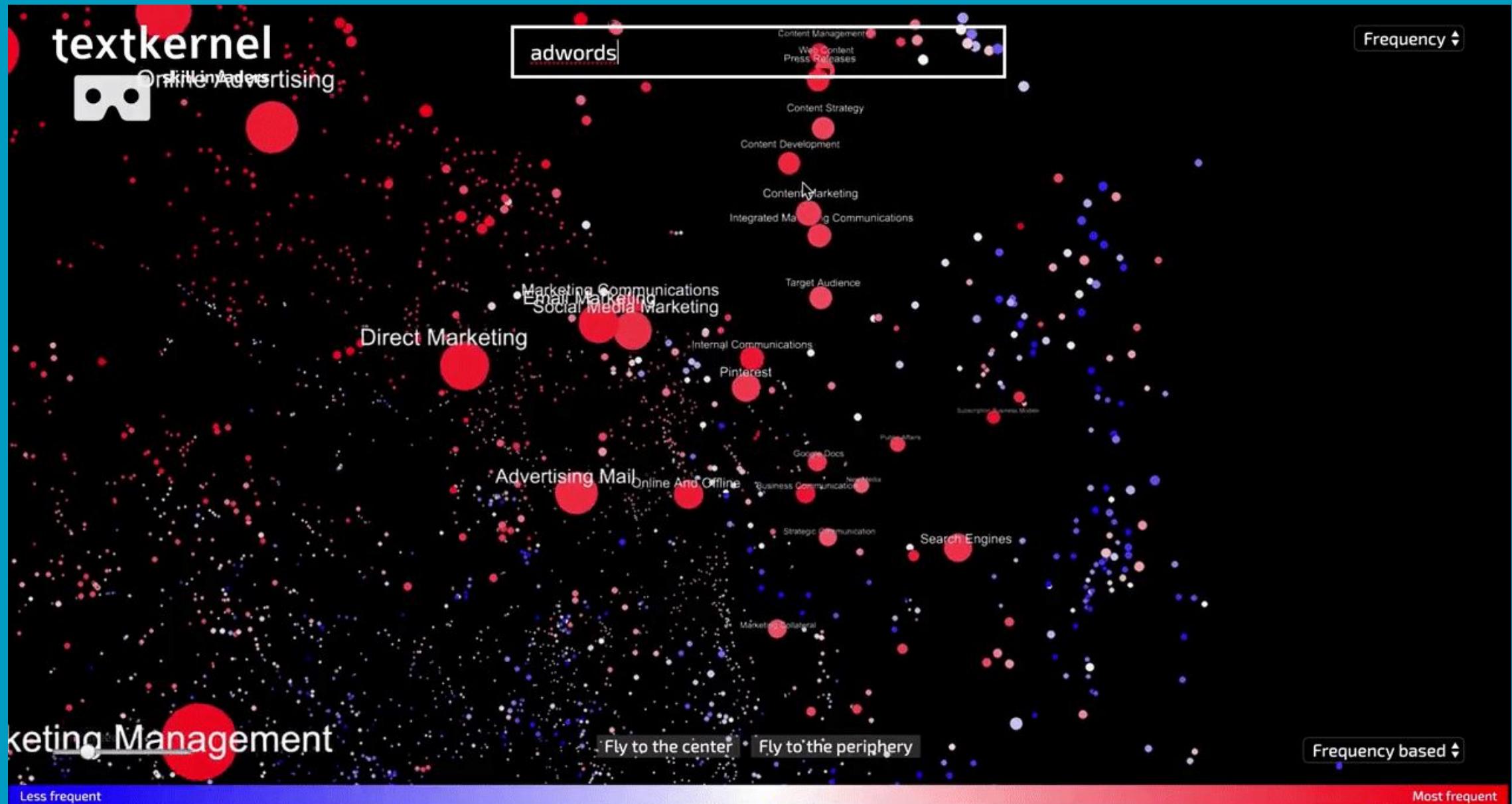


Textkernel Skill Explorer

December 2019 Bauke Visser



textkernel

Machine Intelligence for People and Jobs



Founded: 2001

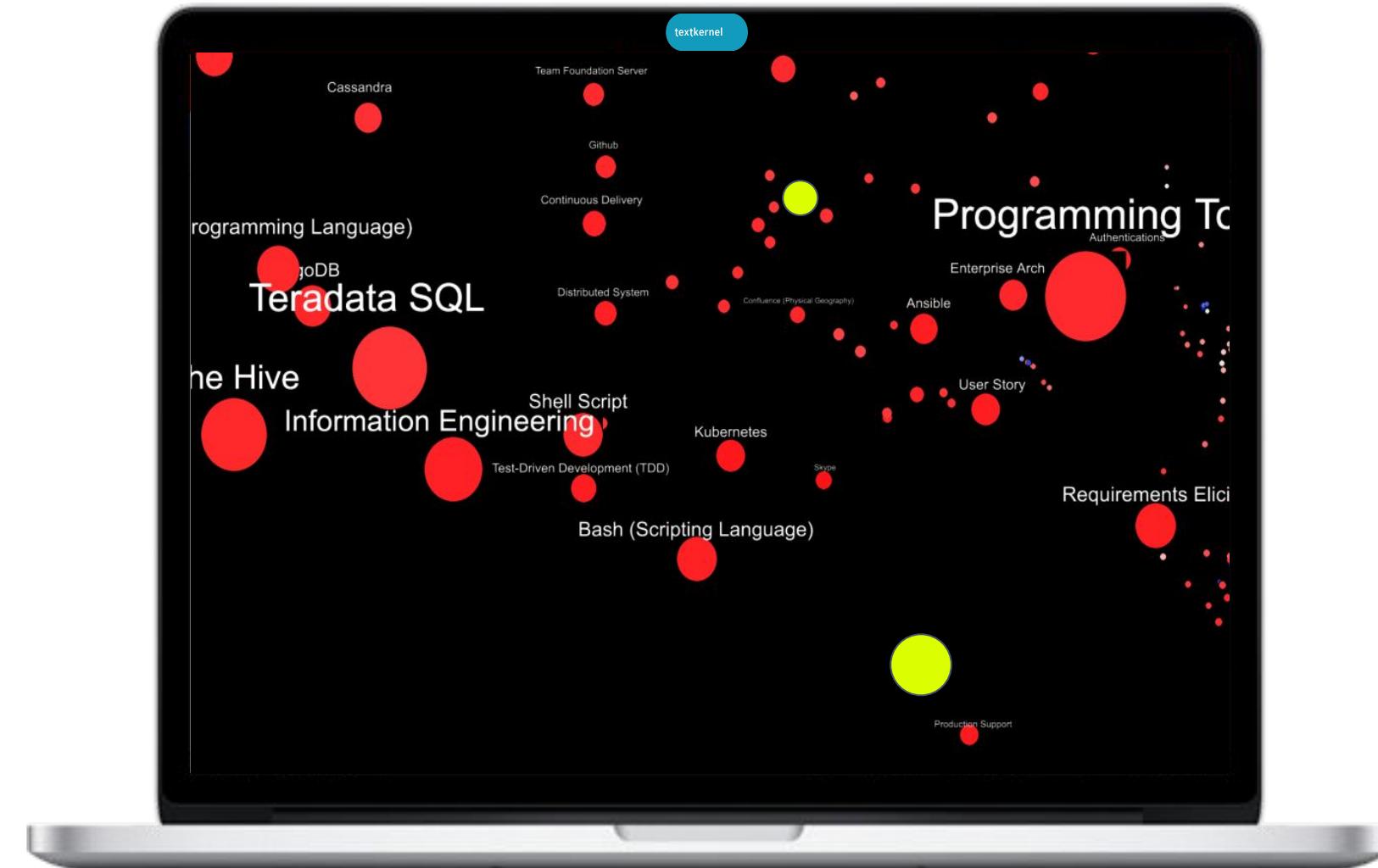
HQ: Amsterdam

140 employees

CV + Vacancy -parsing

Searching + Matching

technology

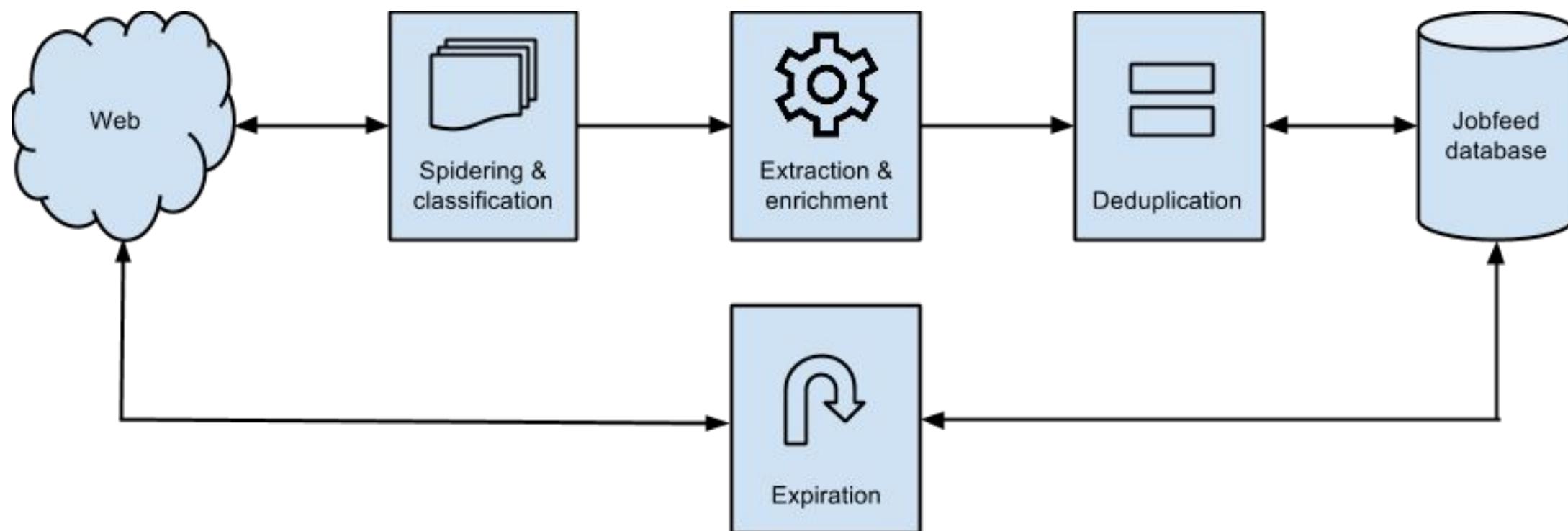


[Blogpost](#)

[Demo - movie](#)

[Live demo](#)

Jobfeed



Skill extraction + normalisation

languages : EN, NL, FR, DE, IT, ES

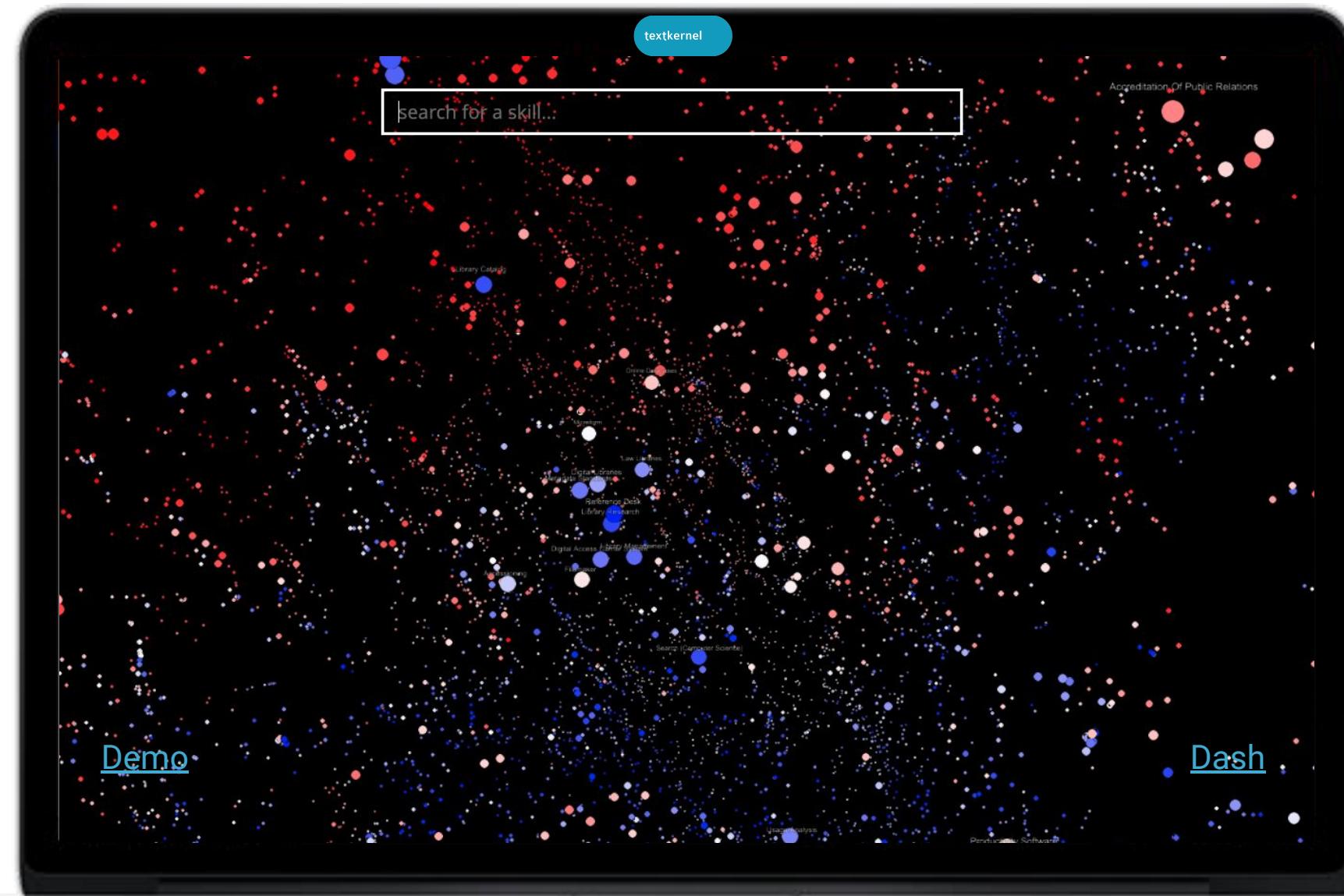
Tech: microservice

Categories: language, soft, IT, professional

~ 8-10k normalised skills

~ 30-40k synonym-instances

~ 12 normalised skills per vacancy



How?

Jobfeed



elastic



pythonTM



PCA

t-SNE

{JSON}
JavaScript Object Notation





Instructions

Screen size: 4.7" - 6.0"

Enable **Screen rotation**

Open link

iPhone

1. Open Safari Private Mode
2. Open Settings
2. Select Safari
3. Enable **Motion & Orientation Access**
5. Reload the page



Controls

Look left → fly left

Look right → fly right

Camera button push 1 → faster

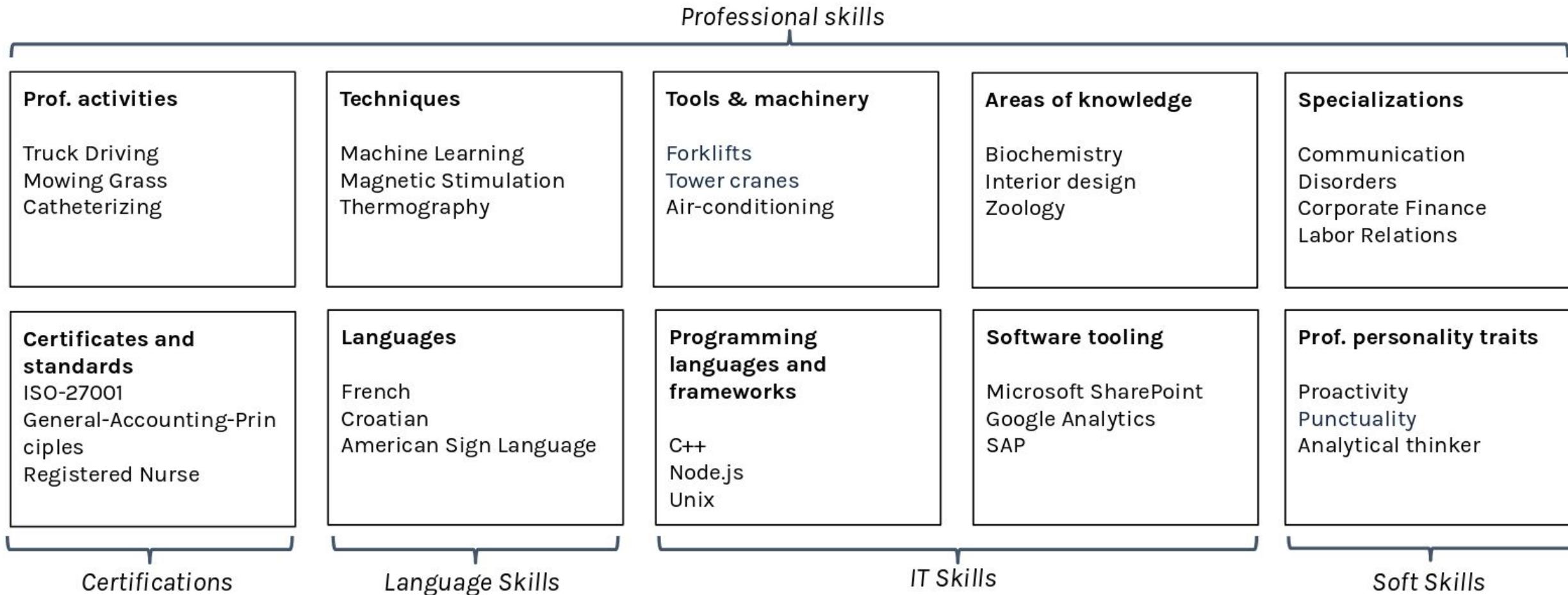
Camera button push 2 → slower

Questions?



Definition of “skill”...

Anything one could “have knowledge of” in a professional context, including:
“be experienced in”
“be specialized in”
“be known for”



Skill mining approaches

- Context heuristics : ‘knowledge of ...’
- Search logs
- External public sources
- synonyms: ‘also known as’

Validation challenges:

Abstractness: ‘Architecture’, ‘management’, ‘coordination’, ‘support’

Ambiguity: ‘React” > javascript framework

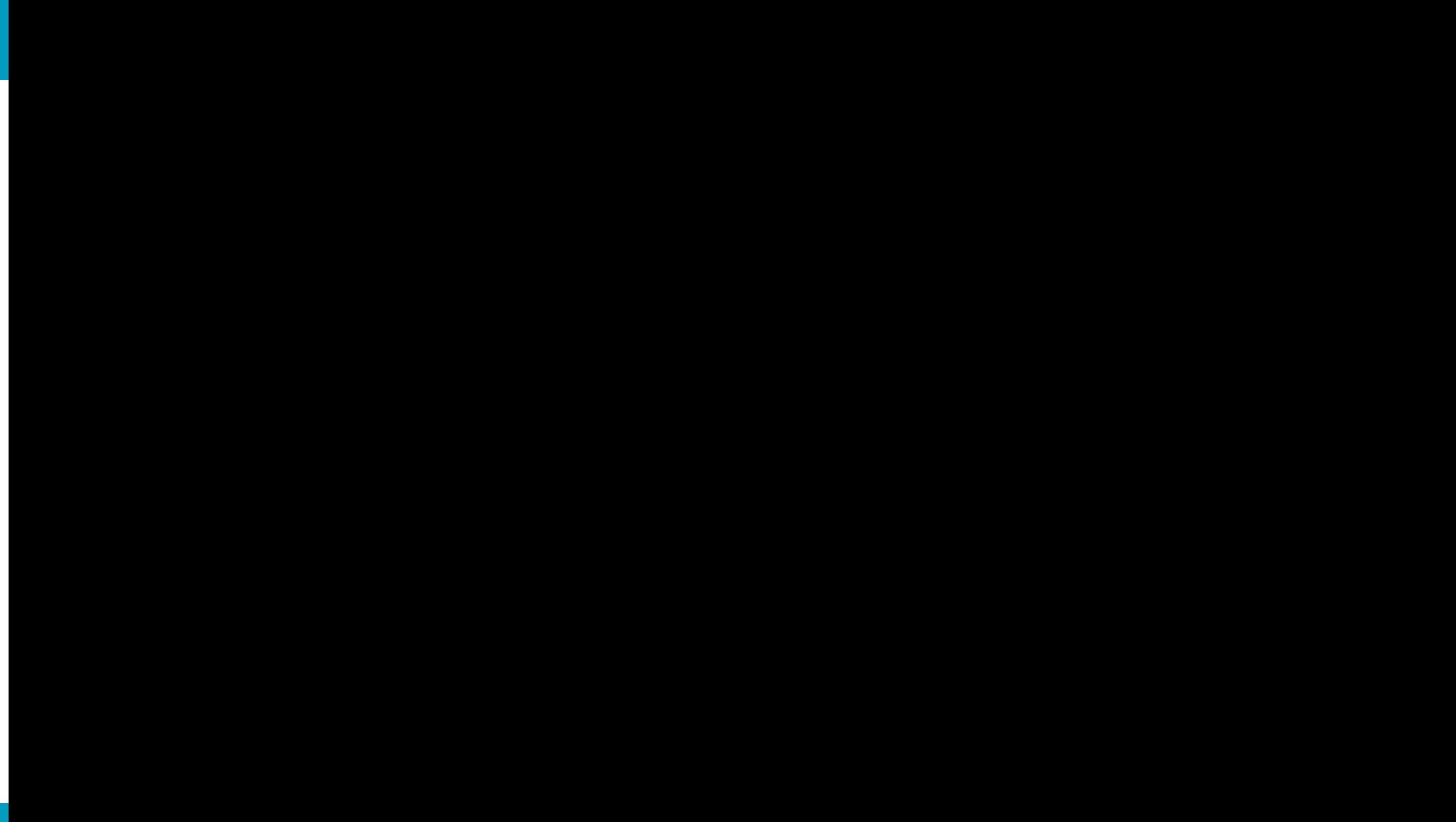
Negation: ‘you **don't** need to be good at programming’

Acronyms: [ERP](#)

Context analysis: Neural net (10 words before and after)

Innovation Week

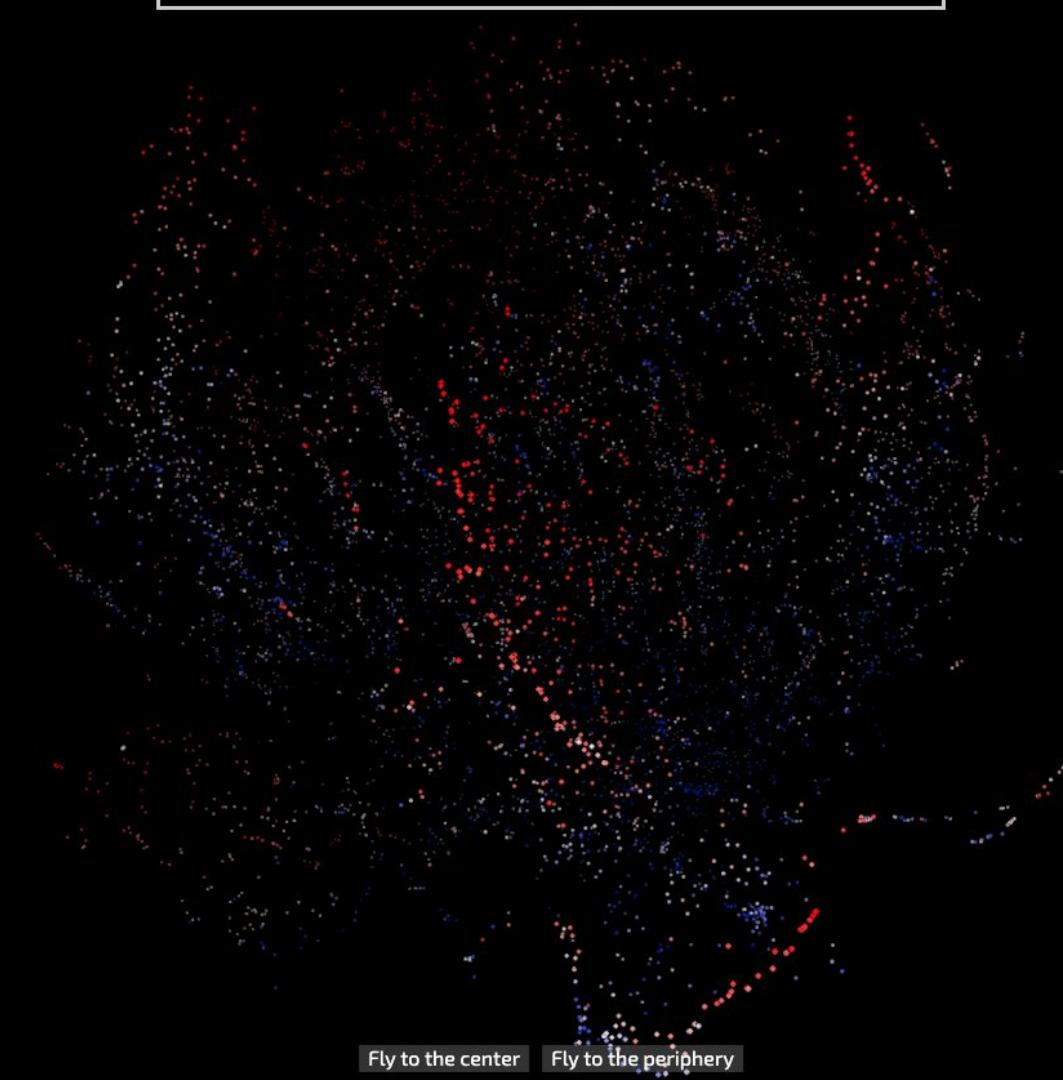
- May: pitches + voting
- June-July: recruitment
- Last week of august: one week of Adrenalin
- Friday-afternoon: presenting + pricegiving





search for a skill...

Frequency ▲



Fly to the center Fly to the periphery

Frequency based ▲

Zoom speed:

Less frequent

Most frequent



Video Editing Post-Production

WordPress

Frequency ↑

Digital Media

Copy Editing

Freelance Pro
Script Recording And Reproduction

Podcasting

Article (Publishing)

Document

intent

Filmmaking

Engineering

Design

Photography

Visual

Effects

Post

Production

Editing

Software

Tools

Cameras

Microphones

Lighting

Reflex

Cameras

Document

Editing

Software

Tools

Cameras

Microphones

Lighting

Reflex

Cameras

Document

Editing

Software

Tools

Cameras

Data Streaming

AP Stylebook

New Reporting

Content Management Systems

Blogs

Creative Writing

WordPress

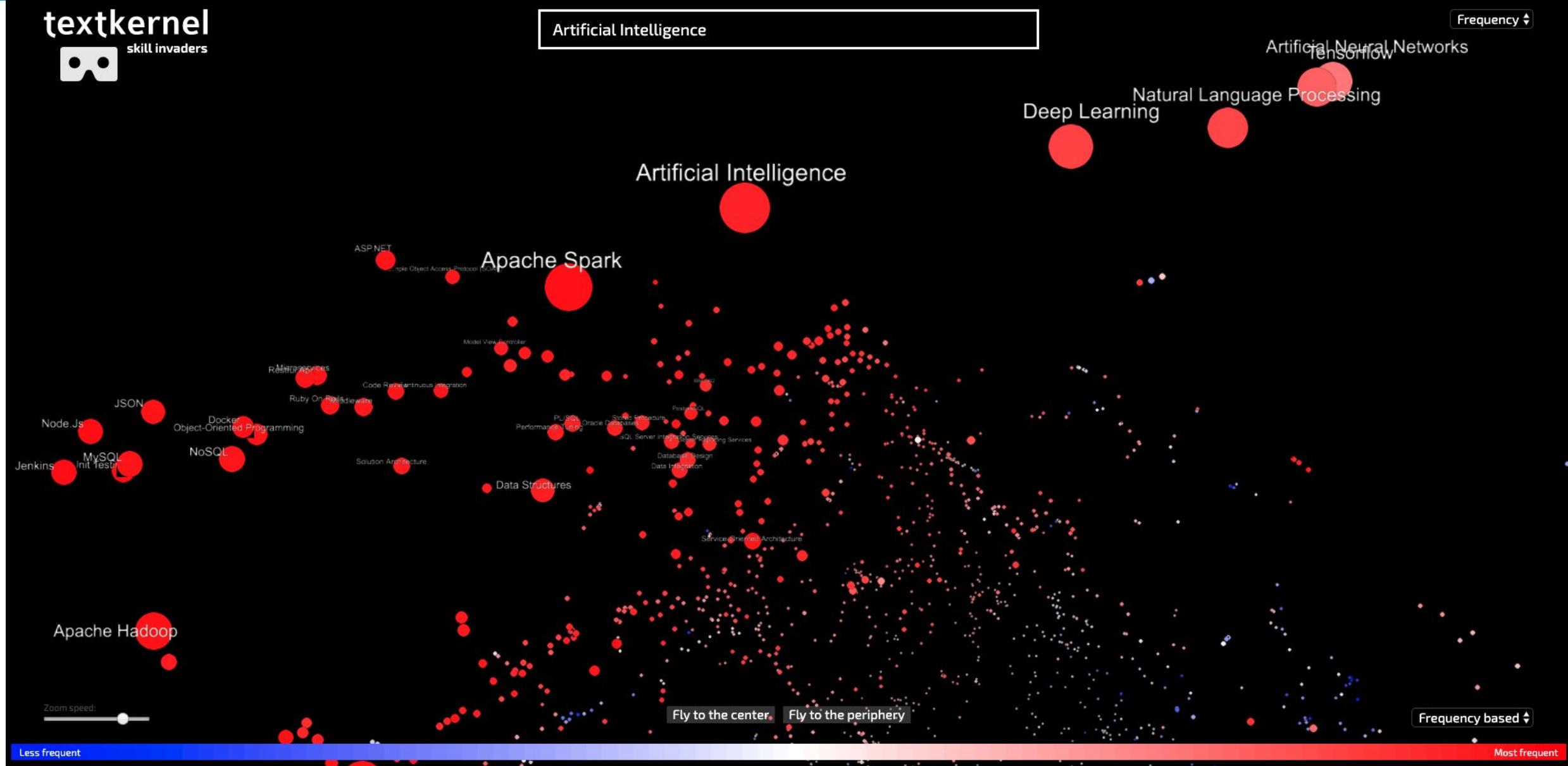
Zoom speed:

Fly to the center Fly to the periphery

Frequency based ↑

Less frequent

Most frequent





Hip Replacement

Frequency ▲

Sepsis

Unitless Automatic Collision Notification

Hip Replacement

Adolescent Medicine

Cardioversion

Continuous Renal Replacement Therapy

Labor Delivery Recovery And Postpartum

Ge Centricity

PowerChart (EMR Software)

Surgical Emergency

Certified Playground Safety Inspector

Prostate Cancer

Ausseßar

Sigmoidoscopy

Intubation

Survivorship Support

Maten

Advanced Pediatric Critical Care

Arthroplasty

Peva Spinal

Object Linking And Embedding (OLE)

Expense Account

Chiropractic

Physical therapy

Object linking and embedding

Infant Heart Defects

Zoom speed:



Less frequent

Certified playground safety inspector

Most frequent

Fly to the center Fly to the periphery

Frequency based ▲



search for a skill...

Clusters ▾

Zoom speed:

Fly to the center Fly to the periphery

Mental Preparation

Contour Plowing

Functional Family Therap

Executive Functions
Under Hair Removal

50 Clusters ▾

Psych

