

Cultivando el talento y la diversidad en equipos de ingeniería

Cultivating talent and diversity in engineering teams

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PRESENTERS



Miguel Ángel Fernández



Natalie Grefenstette

Intro

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4

5

Q&A

Qatium

No hay futuro sin agua

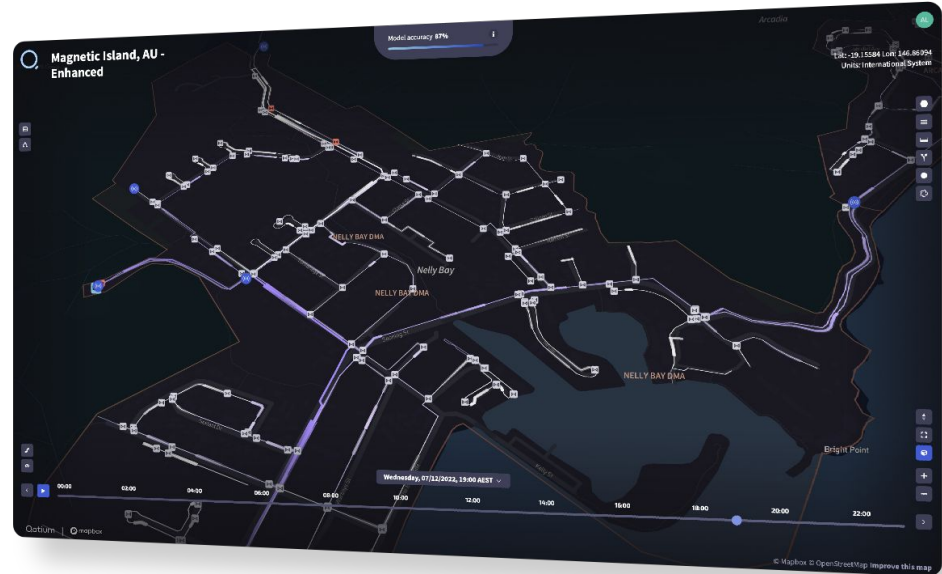
No future without water

Water management platform

Qatium is an easy-to-use water management platform for utilities of all sizes.

Teams get full visibility to run their networks effortlessly in an open, digital environment.

We support rural or underserved utilities by offering our core functionality for free.



AGENDA



1

5 mins

Hiring challenges

2

3 mins

Introducing Qatium's plan to deal with them

3

8 mins

The map meets the terrain

4

5 mins

The inside view

5

5 mins

Results

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Q&A

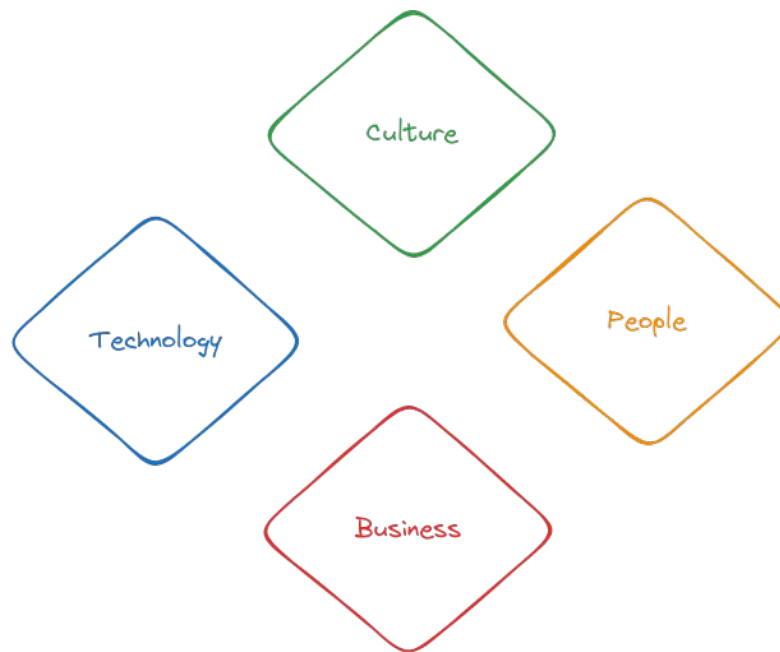
HIRING CHALLENGES

- Hiring is HARD
- Shortage of soft. engineers
- Soft. engineers have high expectations: salary, benefits, flexible work...
- Hiring is time consuming



HIRING CHALLENGES

Hiring is only the tip of the iceberg.



HIRING CHALLENGES

Creativity

Reputation

Homogeneity vs Diversity

Viewpoint

Retention

Innovation

- Target audience: individuals with unique backgrounds, limited programming experience and high potential



Recruitment

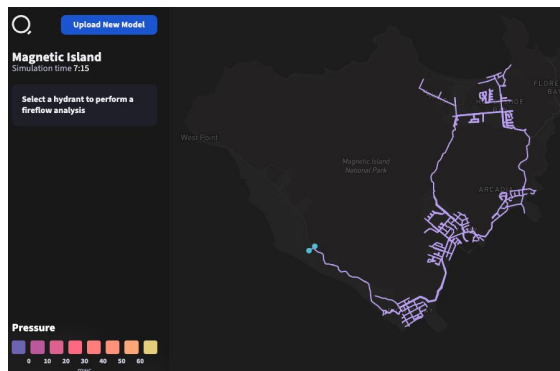
- Selection criteria
- Selection process
- Talent attraction techniques

Training program

- goal: members can participate in the product
- languages and libraries: typescript, react
- introduce domain knowledge
- introduce XP practices (our flavor)
- team conventions: team development techniques
- culture: autonomy, impact, collaboration

EXECUTION

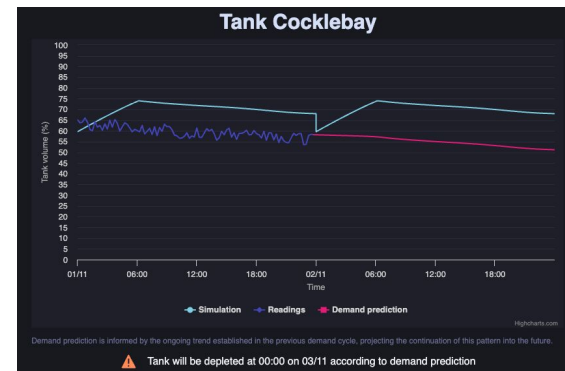
3 projects over 5 months



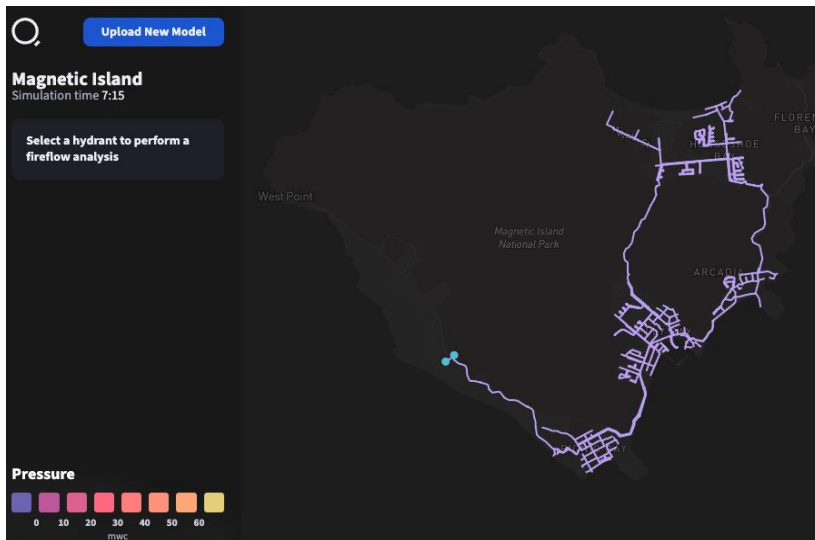
Fireflows



Control logic



Tank emptying



Fireflows

Technologies

- Typescript
- Mapbox
- EPANET
- Jira
- Docker



Skills

- Test driven development
- Pair programming
- Hydraulic concepts
- Simulations
- Visualizations



Control logic

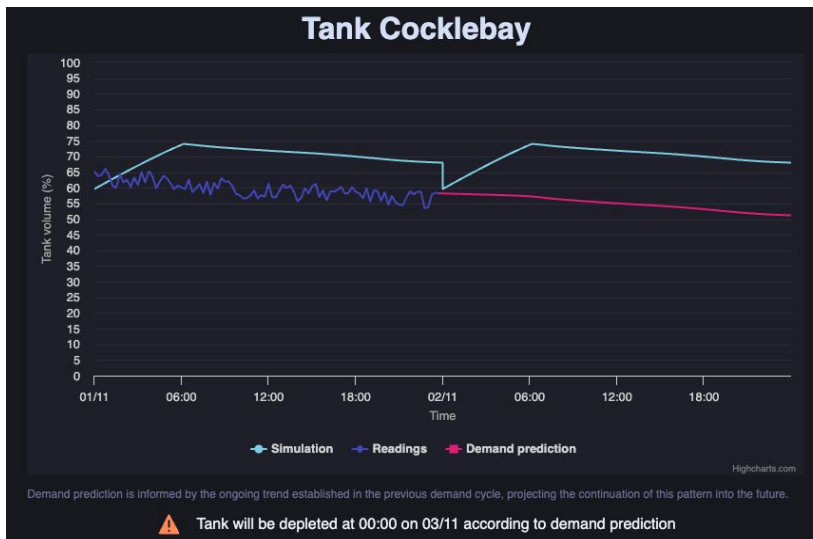
Technologies

- React
- Vite
- Highchart graphs



Skills

- Data science
- Collaboration with other teams
- Accessibility
- Managing sensor data
- Communicating project outcomes



Tank emptying

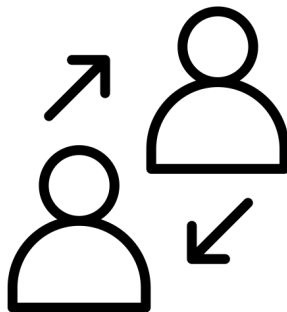
Technologies

- Regression-js



Skills

- Machine learning
- Autonomy in managing user stories and tasks
- Developing complementary tool for the main product > plugins



- Mentorship
"It's crucial that mentees drive their mentorship"
- Peer support

PARTICIPANTS



Natalie Grefenstette



Anna Moura Sobral



Fco. Javier Bolívar



Mercedes Argüelles

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Q&A

PARTICIPANTS' VIEW



Challenging Enriching Gaining confidence
Learning new skills Growing Out of comfort zone
Overwhelming Gratifying
Stimulating Scary

"[It was] a warm welcome to product development in Qatium"

"[It was] amazing to have the freedom and time to take our own decisions and learn why we are doing things.."

"It has helped me gain confidence"

"When directly joining an existing team is easy to rely on more experienced people, but in [the initiative] you see what you are capable of doing with equal peers"

"We had space to make mistakes, test, and explore new techniques"

"Space to use technologies i didn't know in a very approachable way"

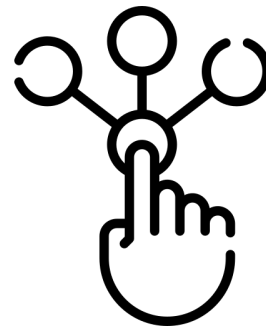
"It definitely impacted my knowledge and professional development in the short term"

Joining teams

- Choosing teams (difficult)
- New colleagues (new)
- Onboarding onto complex projects
- Autonomy
- Challenging new skills

Medium term

- Active team members
- Level reviews
- Focus on different skills
- Product and Innovation teams



OUTCOMES FOR THE COMPANY

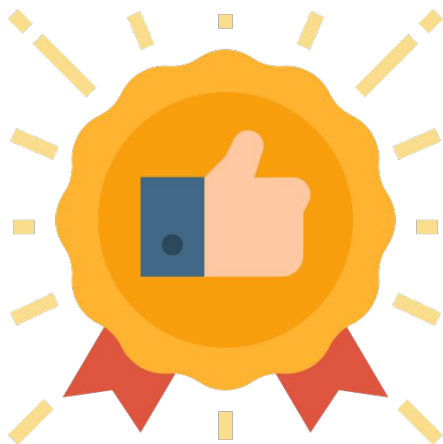


Diversity

Skills

View points

- 3 proofs of concepts finished and published that provided value to the business discovery and marketing > 1 is now a plugin, 1 soon to be
- Each person collaborating in different product areas
- Smart, high motivated, unique individuals contributing to the teams with different skills



- Great way to integrate new talent for product companies in the same stage
- Investment in time and energy but pays off!
- Planning and timing is important
- Everyone is able to contribute to your project, give them the opportunity and support

Thank you!