

spyrosoft

# Shaping technology, *together*

Spyrosoft Group

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## AGENDA

- | no | topic                        |
|----|------------------------------|
| 1  | <b>About Spyrosoft Group</b> |
| 2  | <b>Case studies</b>          |



SPYROSOFT GROUP

# 1<sup>ST</sup> fastest growing technology company In Europe in 2021

FT FINANCIAL  
TIMES  
statista

1000 EUROPE'S  
FASTEST GROWING  
COMPANIES

2022  
& 2023



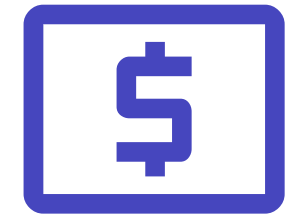
## KEY FACTS ABOUT SPYROSOFT GROUP



**1500+** employees



**Listed on** Warsaw Stock Exchange



**69M USD** in 2022



**150+** clients

# Our offices

## Argentina

- Buenos Aires

## Croatia

- Zagreb
- Osijek

## Germany

- Stuttgart
- Brunswick

## India

- Chennai

## Norway

- Bergen

## Poland

- Wroclaw
- Cracow
- Warsaw
- Bialystok
- Szczecin
- Lodz

## Romania

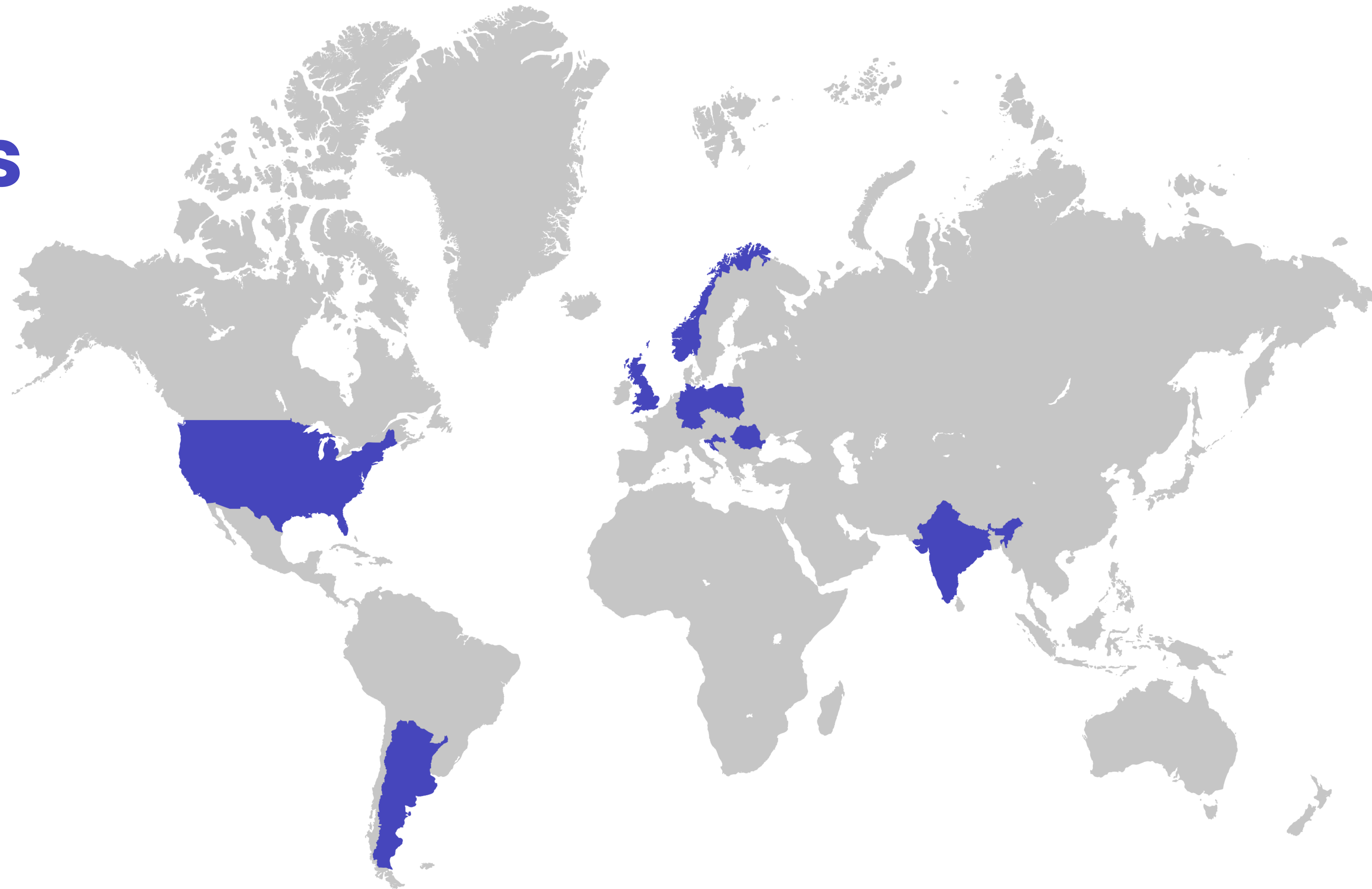
- Timisoara

## UK









- Edinburgh
- Bournemouth

## USA

- Ann Arbor




# Our expertise:

	<b>Automotive</b>		<b>Healthcare &amp; Life Sciences</b>
	<b>Employee Experience &amp; Education</b>		<b>Industry 4.0</b>
	<b>Financial Services</b>		<b>Media</b>
	<b>Geospatial Services</b>		<b>Robotics</b>




WHAT WE DO?

# Our artificial intelligence solutions

A graphic for computer vision featuring a dark background with glowing blue and green hexagonal patterns and wavy lines.


**Computer  
vision**

A graphic for text analytics and NLP featuring a dark background with a complex network of glowing blue and purple lines and dots.

**Text analytics  
and Natural  
Language  
Processing  
(NLP)**

A graphic for machine learning and data science featuring a dark background with glowing blue and green wavy lines and dots.

**Machine  
learning and  
data science**

A graphic for recommendation engines featuring a dark background with glowing blue and green circuit-like patterns and dots.

**Recommendati  
on engines**

A graphic for generative AI featuring a dark background with a glowing blue and green wireframe brain shape.

**Generative AI**



SPYROSOFT GROUP

# Case studies

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# Smart city concept

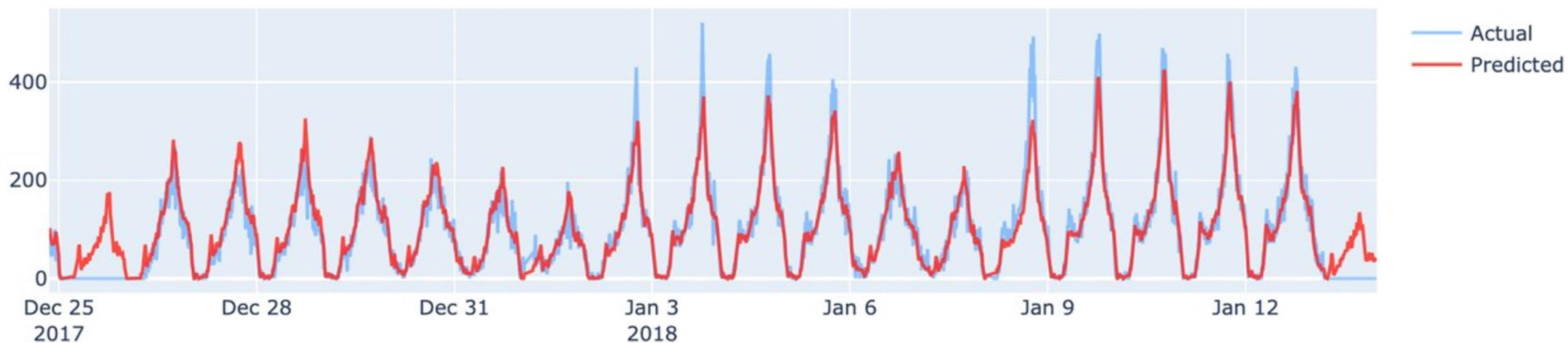


## CASE STUDY

# Smart city analytics – Bus entries

### Time-series forecasting based on Transport for London publicly available datasets:

- A model of bus passenger movements using travel card data
- Data exploration and preparation phase with a flexible data modelling pipeline
- Implementation of multiple models: baseline, Facebook Prophet time series model, LASSO-based
- 18% points improvement compared to baseline model for final LASSO-based model





## CASE STUDY

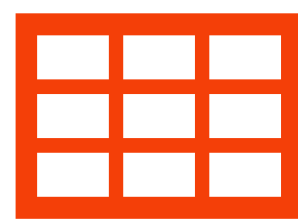
# Smart city analytics – Bus arrival prediction

### Time-series forecasting based on Transport for London publicly available datasets:

- Analyzed the accuracy of current predictions made by the city of London and visualized our predictions for the London bus stops
- Our machine learning model trained on a small amount of data (~500 records) achieved similar results to London's system
- Analysis of bus stops that are usually most delayed



**TAP data**



**Data preparation**



**Model training**



**Results  
visualization**



**Technology**



## CASE STUDY

# Smart Home system – Sinum Cloud

### Product description

Tech Sterowniki, a company from Poland that main area of expertise was in semiconductor component manufacturing, started a new digital strategy. Part of it was to create a digital product for residential market. Sinum Cloud is product that allows user to control and monitor various devices like thermostats, lights, blinds, air conditioning and others via web and mobile application.

### Business needs

Smart Home systems is a growing market in Europe and globally. Tech Sterowniki recognized that trend and started a new line of devices targeting the residential market. However, as a company focused on hardware and embedded software engineering, they needed support of a partner experienced in creating digital products.

### Our services and responsibilities

Cooperation started with consulting services. The goal was to create a robust architecture and evaluate usage of cloud services. Spyrosoft's final recommendation and the Clients' decision was to create a hybrid IoT backend partially based on Azure. In the delivery phase, Spyrosoft was responsible for full application lifecycle process, building an infrastructure, backend, web and mobile applications.





CONTACT

# Thank you



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