



# INTERNET OF THINGS

Development expertise





# SUMMARY

Founded in 2006 as a custom mobile and web development company, R-Style Lab has gone a long way to expand our expertise, choose a new opportunity within the burgeoning Internet of Things industry and become a single-point-of-contact service provider for small and medium-sized businesses operating in the reality of “real-time everything” economy.

**We will help you develop the entire software ecosystem — i.e., web, mobile and wearable applications, as well as low-level software enabling smooth and secure M2M data flows — for your connected solution and seamlessly merge it into the existing IT infrastructure.**



EXTENSIVE IOT DEVELOPMENT SERVICES TO  
TRANSFORM YOUR BUSINESS

---



# MOBILE DEVELOPMENT

Our expert team crafts custom mobile applications enabling real-time data visualization and remote control of connected devices — including the entire range of consumer electronics behind the iOS & Android systems (HealthKit, HomeKit, Android Auto, Android Things).



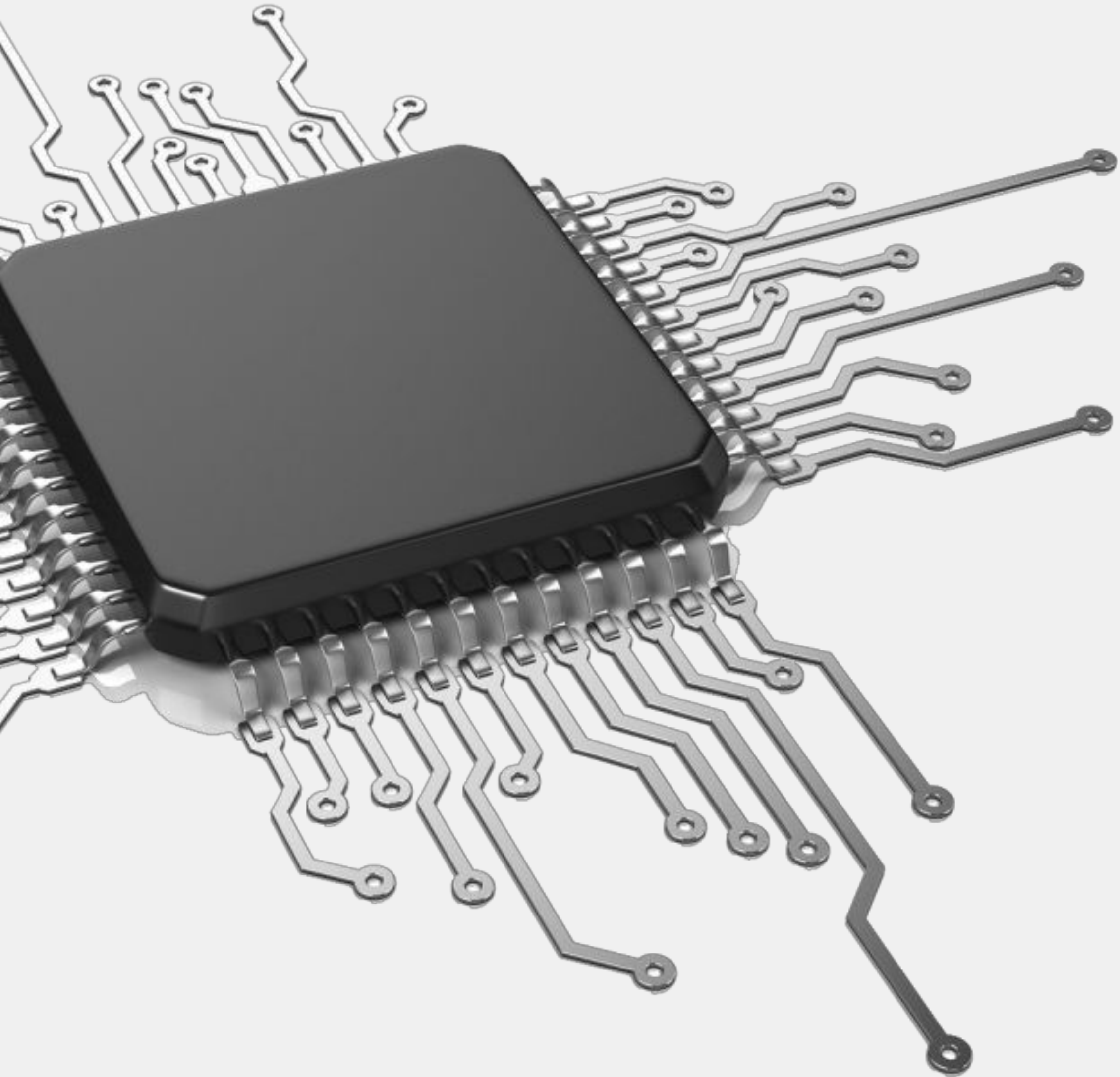
# WEB DEVELOPMENT

We leverage the power of flexible PHP and JS frameworks and cloud managed services to create scalable infrastructures and intuitive front-ends and thus help businesses automate workflows, enhance the functionality of IoT solutions and manage the data coming from multiple endpoints.



# WEARABLE APPS

The R-Style Lab team knows how to achieve fault-free device-to-device communication despite the constraints of wearable application development which stem from limited processing capabilities, short battery life and EMI influence. Furthermore, we'll help you design effective UIs to boost your gadget's consumer appeal.



# EMBEDDED SOFTWARE

We exploit the C/C++ and LUA technology stack to boost the efficiency of sensor data acquisition and analysis and ensure connected gadgets' reliable communication with the OS and other devices within an IoT system. Tap into our low-level software development expertise to add smart connectivity and data exchange capabilities to your IoT solution!



# ELECTRONICS PROTOTYPING

We will test your cutting-edge idea through PoC, prototype a connected gadget using off-the-shelf boards (Arduino, BeagleBoard, Raspberry PI) and recommend trusted electronics manufacturers to turn your concept into a market-ready product!



# R-STYLE LAB IOT SOLUTION EXPERTISE

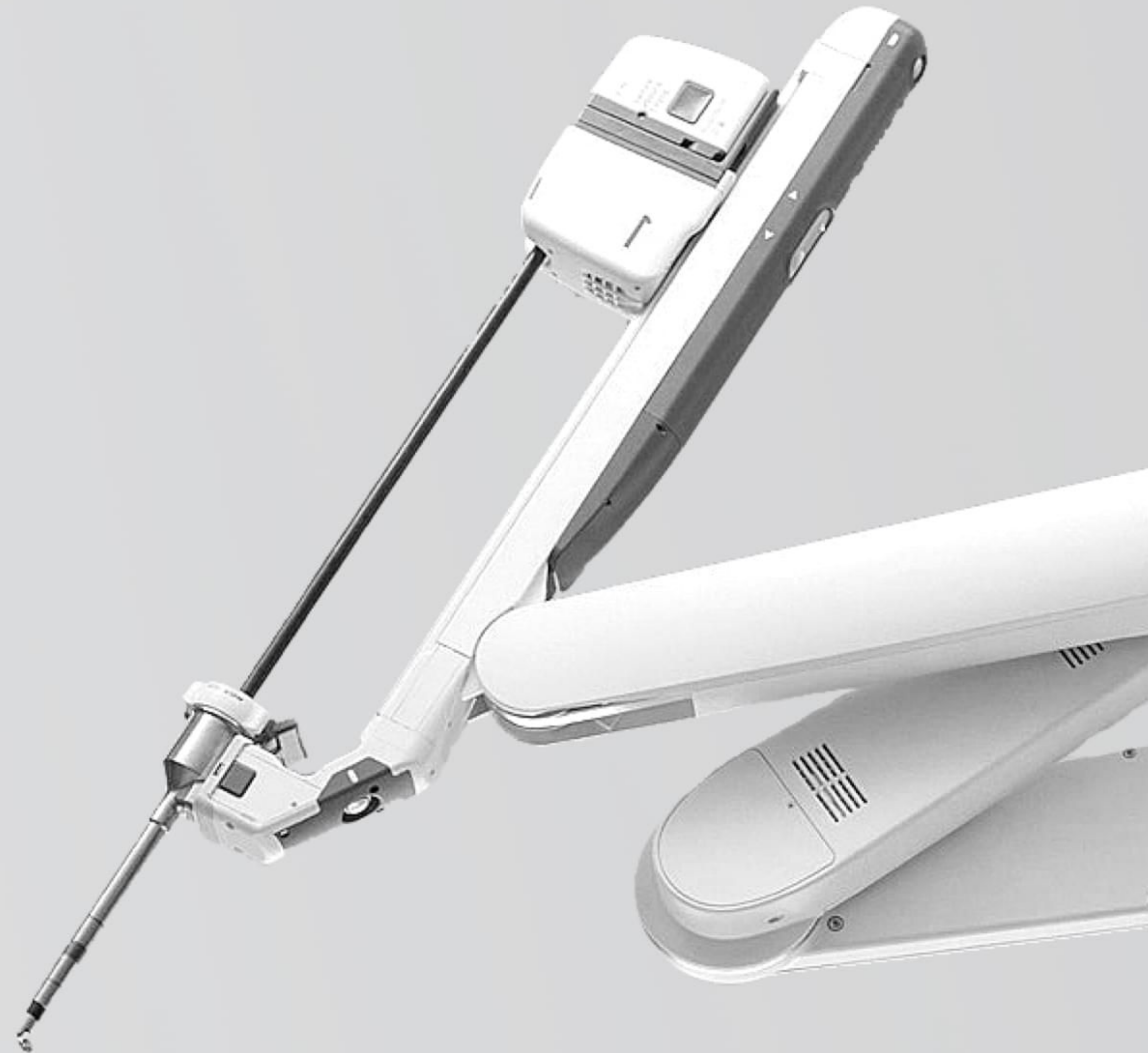




# INDUSTRIAL IOT

---

R-Style Lab provides assistance to OEMs and companies with extensive production facilities in identifying process bottlenecks, automating workflows and enhancing asset tracking.





## Our knowledge of the Industrial Internet of Things ecosystem includes the design, development and full-scale implementation of:

- **AI-powered video analysis systems** enabling remote control of manufacturing sites and unmanned inspections of industrial facilities.
- **Back-office software** incorporating pre-trained AI models for predictive analytics and maintenance.
- **Cloud-based data warehousing solutions** with advanced ETL capabilities.
- **Edge computing solutions** designed for increased IoT security and autonomous decision making.

DISCOVER MORE



# HEALTHCARE IOT

---

R-Style Lab equips healthcare providers and Digital Health startups with tools supporting remote patient monitoring, vital signs tracking, effective diagnostics and healthcare interoperability.





## These software solutions include:

- **Connectivity solutions** for wearables and biotelemetry devices based on reliable communication protocols (Wi-Fi, Bluetooth, BLE, RF).
- **ML-driven data analysis systems** that can be applied to vast volumes of information generated by wearable devices, connected medical equipment and software to detect anomalies.
- **Mobile- and web-based real-time data visualization tools.**
- **Smart emergency detection and notification systems** enabling real-time patient monitoring.
- **Medical image analysis software** seamlessly merged into hospital IT environment.

DISCOVER MORE



# SMART HOME

---

We help innovative startups and device manufacturers create robust software solutions for their connected home products, reduce Smart Home systems' reliance on mobile applications and thus bring users one step closer to configuration-less Home Automation!





## Our Smart Home application development expertise encompasses:

- **Home Automation security systems** powered by the image recognition technology.
- **Smart hubs** acting as an interface layer between connected home appliances which use different communication protocols.
- **Smart Home system integration** with 3rd-party voice assistants (Siri, Alexa, Cortana, Google Assistant).
- **Feature-rich mobile applications** for connected home configuration and management.

DISCOVER MORE



# SMART RETAIL

---

We develop IoT-based inventory management and customer engagement solutions for consumer goods manufacturers, warehousing and transportation companies and brick-and-mortar retailers.





## Here's what we can do to smarten up your business:

- **Beacon-based in-store customer engagement solutions** facilitating on-demand delivery of pricing information and relevant promotional content.
- **Interactive digital signage** synced with shopping apps.
- **Sensor-, RFID- and barcode-based inventory tracking systems.**

DISCOVER MORE



# FEATURED INTERNET OF THINGS PROJECTS

---



# MULTI-LEVEL IOT SOLUTION FOR CRYO CHAMBER MANAGEMENT

A turnkey SaaS solution for hospitals and spa salons which enables effective cryo unit management, secures patient data and features a PoS system.





The R-Style Lab team helped a US startup create a comprehensive SaaS solution for a custom cryo chamber featuring:

- **Cryo chamber management system** which captures data from head and pulse sensors and enables remote patient monitoring.
- **Secure Android tablet app** based on the fingerprint recognition technology which provides on-the-go access to patient health records.
- **Web-based console** for centralized cryo unit management.
- **White label cryo chamber management solution** with built-in PoS and CRM features.

FULL CASE STUDY

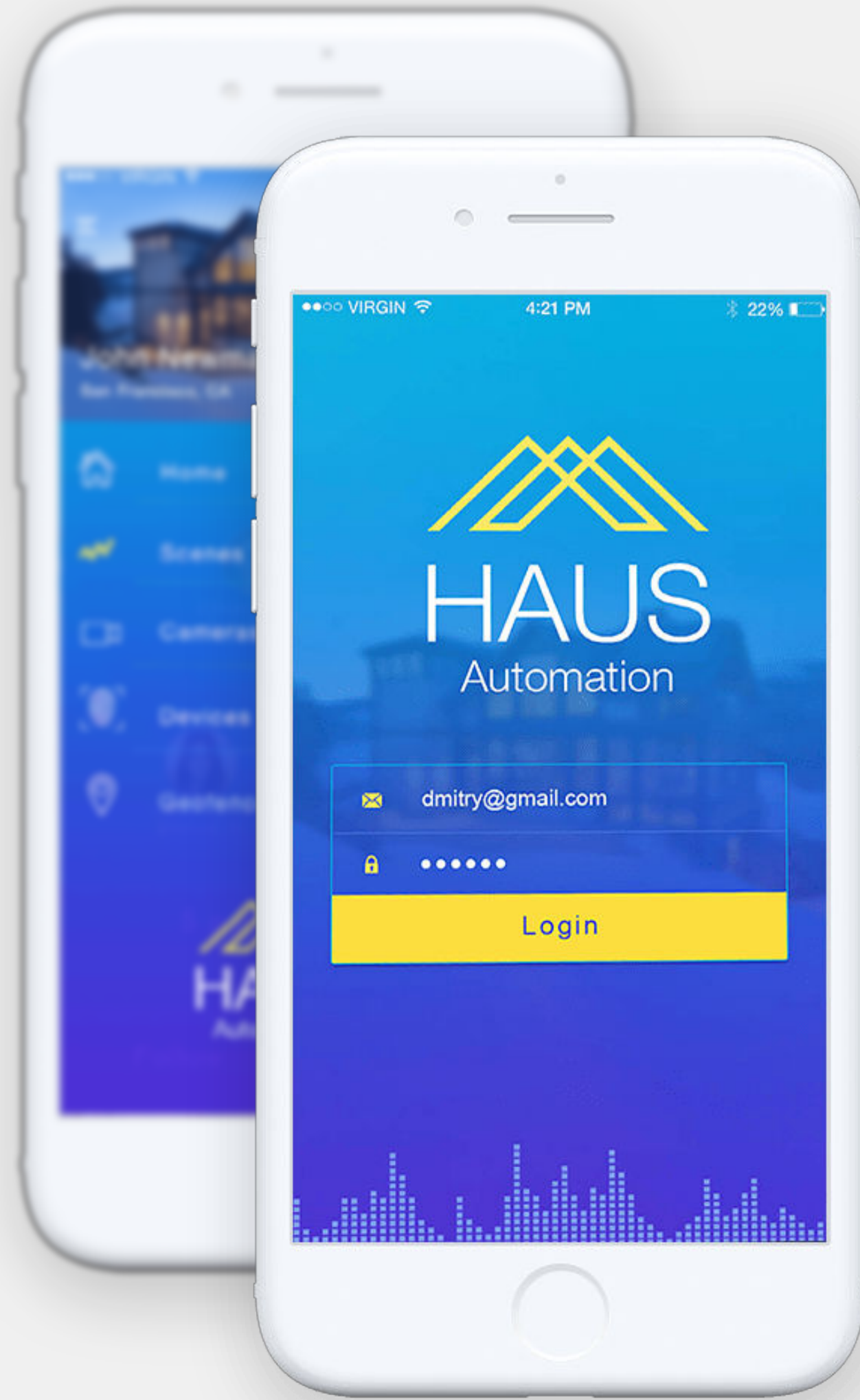


# SMART HOME HUB FOR CONFIGURATION-LESS HOME AUTOMATION

---

We created an entire software ecosystem for a leading-edge device hub supporting automated connected home management scenarios.





### The key features of the software solution include:

- **Drivers** for plug-and-play gadget configuration and OTA firmware updates.
- **Middleware** ensuring sensor data and device compatibility.
- **Back-end system with an elaborate business logic** (including user behavior pattern analysis and connected home performance optimization).
- **Android app** for a touchscreen control panel.

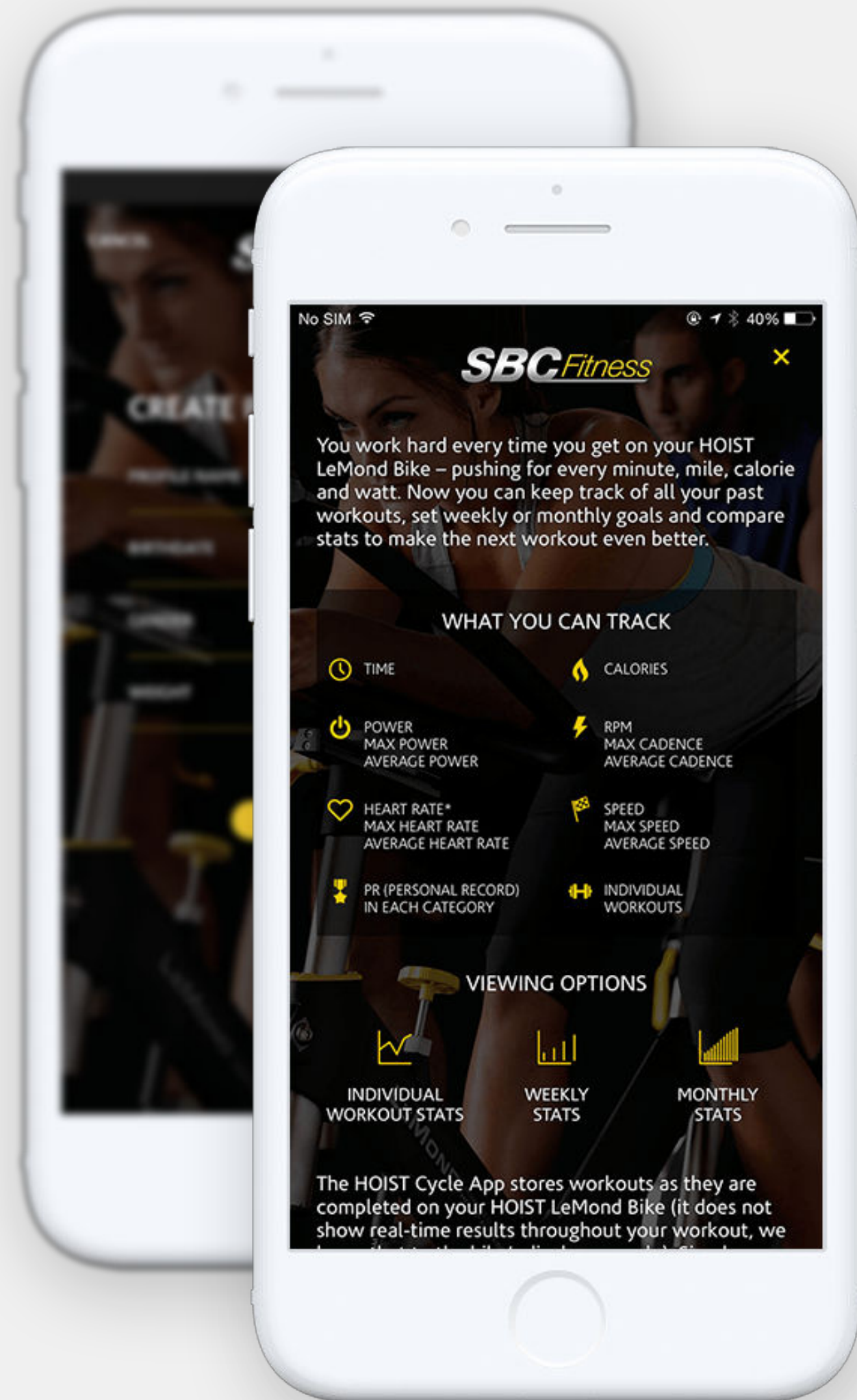
FULL CASE STUDY



# BLE-ENABLED MOBILE APPS FOR STATIONARY BIKES

iOS and Android mobile applications which are integrated with a stationary bike console via BLE and provide access to user workout data.





Among the essential features of the mobile solution we should name:

- **Device integration module** which automatically finds, connects to and remembers a stationary bike within the given range.
- **Workout module** enabling users to view training data over a given period with the help of custom day/week/month filters.
- **Social media integration.**

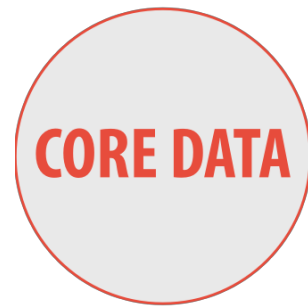
FULL CASE STUDY



# IOS APP FOR REAL-TIME EKG SENSOR DATA VISUALIZATION

---

A Bluetooth-enabled iOS app which works in sync with a custom heart monitor and visualizes EKG sensor data in real time.





The heart rate monitor captured the electrical signals of a human body, thus enhancing the diagnostics and therapy of heart conditions. Since the gadget was implemented by practicing cardiologists, it was essential to visualize sensor readings in real time.

In order to achieve the goal, our mobile app development team had to segment the incoming Objective-C data into separate data units (raw C), transfer part of the workload to GPU and render the data using OpenGL line primitives and Fragment Shaders.

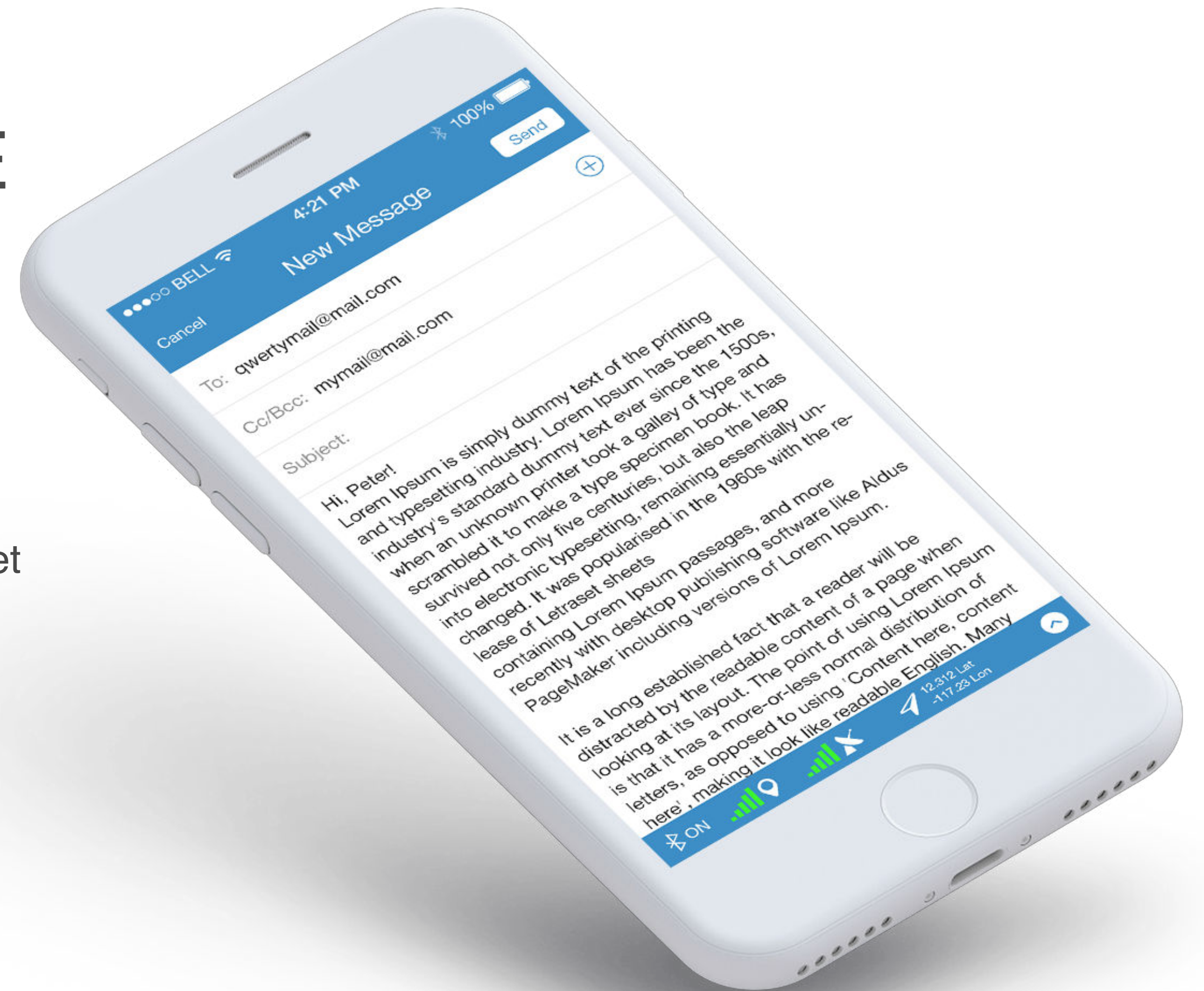
[FULL CASE STUDY](#)

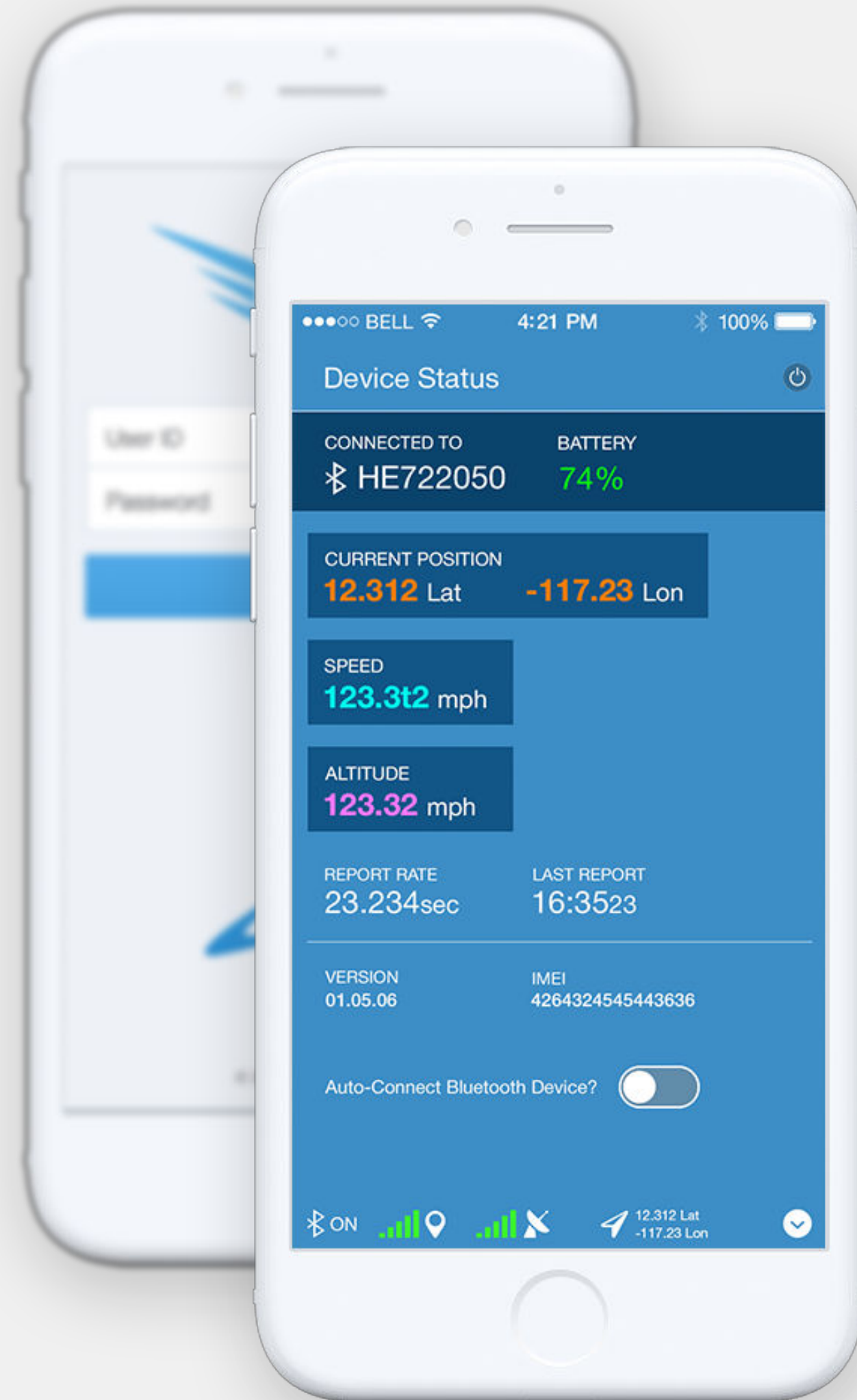


# BLUETOOTH-ENABLED MOBILE APP FOR REAL-TIME FLEET MANAGEMENT

---

A sleek iOS app which is integrated with custom GPS tracking devices and enhances communication between drivers and fleet managers.

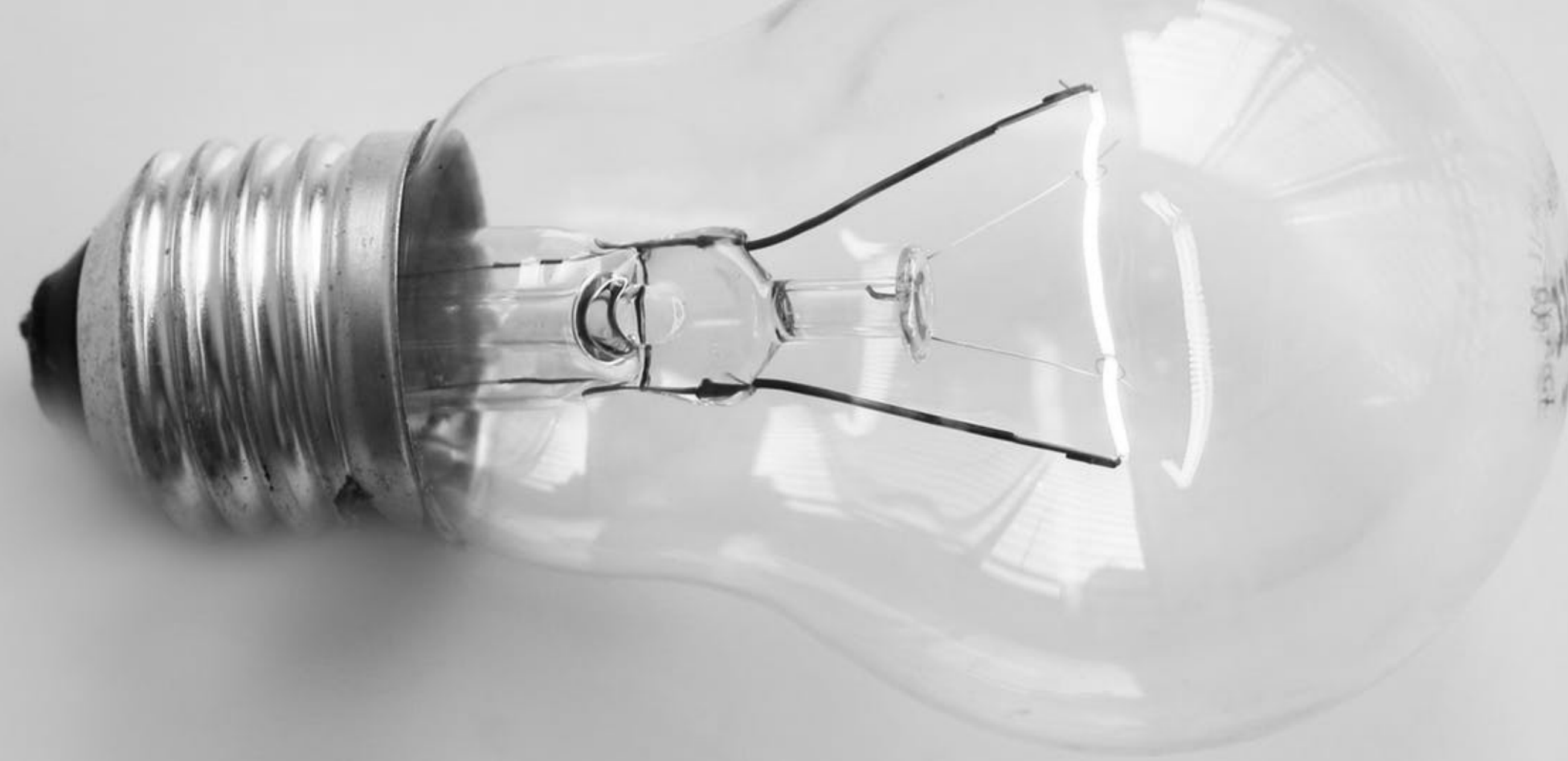




Among the essential features of the mobile solution we should name:

- **User profile** supporting secure authentication and password encryption.
- **Instant messaging** (with private group chats).
- **Reporting module** which allows drivers and fleet managers to create and manage reports on trip status, fuel consumption, etc.
- **Multilayer mapping** — i.e., the option to switch between GPS, real-time traffic and route planning data.

FULL CASE STUDY



DO YOU HAVE YOUR OWN PROJECT TO DISCUSS?  
DO NOT HESITATE TO CONTACT OUR BUSINESS  
DEVELOPMENT TEAM!

[GET A FREE QUOTE](#)



## BUSINESS OFFICE

---

425 Market Street,  
San Francisco, CA, 94105  
+1 888 252 3073  
[ask@r-stylelab.com](mailto:ask@r-stylelab.com)

## DEVELOPMENT CENTER

---

76A Masherova Ave,  
220035, Minsk, Belarus  
+375 17 306 48 42  
+375 29 348 44 44

**[R-STYLELAB.COM](http://R-STYLELAB.COM)**