



CASE STUDY · EDUCATION TECHNOLOGY

Skaeo EduSense

A campus attendance and presence platform that knows who is actually in the room. Architected, built and shipped end to end by Nuvayu Tech for a client, and now live on university campuses in India.

Bluetooth (BLE) beacons

Multi-tenant SaaS

iOS, Android and web

9 apps and portals

Built for India's DPDP Act

Skaeo EduSense is our client's product (skaeo.com). This brief describes the work Nuvayu Tech did on it.

THE CHALLENGE

Most colleges still take attendance by roll call. It uses up teaching time, and proxy attendance, where a friend answers for someone who isn't there, is easy and common. Marks, leave, fees and gate security usually sit in separate systems, so a student who is falling behind is often noticed only when it is too late to help.

Our client wanted one platform that could confirm a student was physically present without a roll call, apply the institution's attendance rules automatically, and give every role on campus the view it needs.

WHAT WE BUILT

What the institution gets	How the platform does it
No more roll call	Bluetooth beacons in each classroom are detected by students' phones, so attendance is recorded as students walk in
A real check against proxy attendance	Partway through a class, faculty push a short code that can only be answered from inside the room
Attendance rules applied automatically	Tracking against the 75% requirement, automatic detention lists, early alerts to mentors and parents
Privacy designed in	Built for India's Digital Personal Data Protection Act, with an audit trail on every consent change
One build, many institutions	Multi-tenant from the ground up, so a new institution is added without a new build
Usable by everyone on campus	Hindi-first guard tablets; a Parents app in 10 Indian languages, in native script



NINE APPS AND PORTALS, ONE PLATFORM

Every role on campus has a purpose-built surface, all fed by one live backend. Two web portals: one for the institution's leadership and administration, and one for the client's own team to manage every institution on the platform. Seven mobile apps from a single Flutter codebase: Faculty, Student, Parents, Staff, Security Guard, Vice-Chancellor, and an earlier Student app kept for existing users. Visitor check-in at the gate uses 1:1 face match, confirming a person against their own record and never scanning a crowd.

IN PRODUCTION TODAY

Skaeo EduSense is live on university campuses in India. Shipped and running:

- the full attendance module, with beacon detection and the anti-proxy code
- live updates that keep every app and portal in step the moment anything changes
- bulk import of a semester's students and timetables
- presence notifications for students, mentors and parents
- away-pass and staff duty workflows, and consent records with a full audit trail

WHAT THE BUILD PROVES

Bluetooth that works in the real world

Reliable beacon detection on both iOS and Android.

Real time across nine surfaces

Every app and portal stays consistent the instant anything changes.

Multi-tenant from day one

One codebase and one data model serving many institutions.

One team, end to end

Web: React, TypeScript. Mobile: Flutter. Backend: Node.js, PostgreSQL.

WHO SHOULD TALK TO US

- **Universities and college groups** that want an attendance or presence system built around their own rules and campus.
- **Campus and edtech software companies** that need a build partner for mobile, Bluetooth or multi-tenant work, delivered under their brand.
- **Companies building Bluetooth products** that need the iOS, Android and backend side built and shipped.

We don't resell or demo Skaeo EduSense, because it belongs to our client. We build systems like it for you.

Have a system you've been told is too complex?

Tell us what it needs to do. We'll come back with how we'd build it and a fixed price for the first phase.

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