

# Ionut Andrei Oanca

## Projects

*Open source* I've contributed to [Jellyfin](#) by implementing *SyncPlay*, a feature that lets people watch the same film, at the same time, on different devices scattered around the world. Headline feature of the [10.6.0 release!](#)

Currently working on an unreleased plugin called *SkipIntro*, which lets you skip the intros or repeated content of TV shows. It does this by analyzing the audio of all the episodes and finding similar sound cues.

*Personal projects* Have a look at [my portfolio \(ionutandrei.me\)](#) for other projects.

## Skills and abilities

*Programming* Backend development (Node.js, AWS, CDK, Serverless, *Cloudflare*), Frontend development (TypeScript, React, Vue.js, MUI), Databases (MongoDB, MySQL, PostgreSQL, Redis, *RabbitMQ*), C/C++ (Threads, CMake), Java (JavaFX, Javadoc, JUnit), Android development (React Native, Java, C++, OpenCV), Linux (Bash scripting, system administration, server management, Wireguard), Version control (Git), CI/CD (BitBucket, GitLab CI, Docker, GitHub Pages). Familiar with other languages like C#, Python, PHP, Lua. Tinkering with RP2040, Nordic and ESP32 microcontrollers (BLE).

*Other softwares* Medium-level user in Blender, Inkscape and GIMP. Some reverse engineering with IDA and Ghidra. Past experiences with Xcode and Objective-C.

*Languages* Born in Romania but living in Italy since forever. Proficient in English, written and spoken. Slowly but steadily learning Japanese.

## Certifications

*Jan 2022* AWS Certified Cloud Practitioner. (*Validation number: WZVEN5VJFMREQX39*)

*Dec 2021* DF01: MongoDB Developer (4-day).

*Mar 2015* First Certificate in English.

## Work Experience

*Oct 2022–present* Backend Developer at Treedom, with a bit of Frontend as well. In the System Integration team I'm working on the development of the backend of the Treedom platform, handling the transition from old to new technologies while also adding new features. We employ both a GraphQL Federation, that serves as the main API for the frontend, and AWS Lambdas that handle integrations via an event-driven architecture. Most notable Frontend contributions include the migration of our Signin flows (both website and on mobile apps) and optimizing the rendering of maps with MapBox. Otherwise I'm usually tasked with integrating new features in our internal dashboard. Likewise in past experiences, a lot of emphasis is put on the quality of the code, with rigorous static, dynamic and live testing on dedicated environments.

*Apr 2021–Oct 2022* Full-Stack Web Developer at MOLO17.

In MOLO17 I've got the opportunity to work on production projects, big and small in size, as well as on the development of tools that aided the team in code reviews and code quality.

The main technologies I've used include React, GraphQL, Node.js, MongoDB, AWS AppSync, AWS Lambda.

Major attention has been put into the quality of the written code: we achieved this by following the Functional programming paradigm and by employing several static-analysis and automation tools (like ESLint, Prettier and Danger) while developing and reviewing the code. Tests were written for portions of the codebase that were considered particularly important.

*Mar 2014–Apr 2015* Tailored Android app for the comic duo "*i Papu*".

Developed in a month, the app was presented at *Radioamatore Fiera di Tecnologia* in Pordenone (Italy).

The comic duo needed a way to showcase their work, notify fans of upcoming events and sell their merchandise.

*Jul 2013, Aug 2015* Internship at *Ideal Service*.

I've contributed to the development of the Android version of the "*Rifiuto Zero*" app.

The app served as a way for *Ideal Service* to reach the citizens of the zones under its management.

## Education

*Oct 2016–present* Bachelor Degree in Computer Engineering, *Politecnico di Milano, Milan (Italy)*.

The programme covers both basic disciplines (mathematics, physics, probability and statistics) and programme-specific subjects (computer science, automation, electronics, operating systems, programming and telecommunications).

Studies have been paused for a while but planning on completing them in the future.

*2012–2016* High School Diploma, *ITST J.F. Kennedy, Pordenone (Italy)*.

The offered curriculum ranges from typical high school subjects (mathematics, history, physics, natural sciences) to more technical subjects as well (programming, networking, operating systems, economy and electronics).