# **Alexandru GRIGORE**

## Full-Stack Developer Scala/Java + TypeScript

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I'm a full-stack developer, **Scala/Java** and **TypeScript**-leaning who codes with a typed **OOP/FP** mindset. I care about clarity, modularization/reusability, determinism, and agile development.

I'm building **music-related products** under Aperture Software:

Amplify Music (music theory insights, deterministic collaborative playlists)

SoulKey: music puzzle-platformer game split into a Unity/C# game module and a Scala MIDI core designed to double as a standalone learning tool for musicians MIDI control software, rhythm-game prototypes, instrument-organization tools

#### **Target roles**

Full-Stack Developer · Scala/Java + TS (React Native, Vue/Nuxt)

Backend Developer · Scala/Java

hands-on system designer

hands-on product owner

#### **Skills & Roles**

Roles	Full-Stack Developer ( <i>Scala/Java + TS (React Native, Vue/Nuxt)</i> ) · Backend Developer (Scala/Java) · Tech Lead
Strengths	<b>framework</b> design & development · <b>product/ system</b> design & development · <b>API</b> design & integrations · DX & performance · <b>clean code</b> (DRY/ KISS/ YAGNI/ SOLID) · XP/Trunk-Based · POCs
Toolbox	Java 17 · Scala 2.13 · React Native · Vue/Nuxt · TypeScriptSpring · PlayFramwork · KafkaDocker/K8s · GoCD

## **Work Experience (summary)**

#### Full Stack Developer · Aperture Software

**2025 – present** 

Amplify Music startup: music-theory insights; deterministic collaborative playlists using **Java/Scala + ReactNative** 

#### **Backend Developer · Berrystack**

2024 - 2025

Team lead for Synapse > Databricks migration, using **Python with OOP/FP discipline + spark** framework creation; performance optimizations.

## Full Stack Developer · VisualHive

2023

Visual Hive: fast POC for long-video (e.g. podcasts) > short-clip (social media format) pipeline, using Python with OOP/FP discipline + VueJS

#### Full Stack Developer · Revobet

2023

Revobet: Multi-tenant betting, integration of features, auth, SaaS integrations, with XP practices, using **Java + VueJS** 

#### Scala Developer · GoPro

2021 - 2023

Distributed processing using **Scala on Spark**; reliability/perf; platform improvements.

### Scala/Java Developer · Orange Services

2017 - 2021

Large-scale data platforms using **Scala/Java on Spark**; framework creation; batch and streaming processing; automation/ops.

## Java Developer · Luxoft Romania

2015 - 2017

Hirschmann devices interface: HTML5 interface for devices (SNMP). Industrial HiVision: network management desktop app using **Java** 

## Scala Developer · Brainlight

2014 - 2015

DarZar: e-commerce **crawling/ aggregation/ search/ advanced filtering** using **Scala + PlayFramework (Scala)** 

## **Education**

**University of Bucharest, Computer Sciences, Informatics** 

2013 - 2015

National College High school "Alexandru Odobescu" Pitesti, Computer Sciences

2008 - 2012

# **Main Areas of Expertise**

Roles	
Full-Stack Developer (Scala/Java/TS)	3y4
Scala Developer	7y1
Java Developer	6y0
Backend Developer (typed Python with OOP/FP discipline)	1y6
Tech Lead	1y9
Product Owner	0y5
Mentor / Trainer	1y0

<b>Preferred Technology</b>	Stack
Scala (2.x / FP)	7y1
Java (incl. Java 17)	6y0
React Native	0y5
Vue/Nuxt + TypeScript	1y3
Spring Framework	0y8
Play Framework	2y0
Kafka	4y7
Docker / Kubernetes	2y2

# Types of Work & Contributions

Framework implementation (ingestion/processing standards)	6y0
Data pipelines & ETL (batch/streaming)	5y5
API & third-party integrations	3y0
Real-time / Streaming (Kafka, streaming pipelines)	2y6
DevOps / CI/CD (Docker/K8s, GoCD)	2y0

# Preferred Development Style

Functional + OO (typed; immutability; FP patterns)	11y3
TDD/BDD & Property- Based Testing	2y7
Trunk-Based Development / XP	2y0
Refactoring / Modularization / Design Patterns	8y0
Agile / Scrum / Pair Programming	6y0

<b>Project Types &amp; Industry</b>	
SaaS / Platforms	6y0
Telecom	4y0
Betting / Gaming platforms	0y8
Music tech / Creator tools	0y7
Networking / Industrial devices	1y8
E-commerce / Aggregation	1y3
Mobile / React Native	0y5

<b>Cloud Plat</b>	forms	
AWS	Databricks, S3, EC2, Airflow	1y6
Azure	Databricks, ADLS Gen2, Data Factory, Synapse, AKS, Functions, Key Vault, DevOps Pipelines	1y4
Heroku	app runtime, pipelines	0y5
Hadoop CDH (Cloudera)	YARN, HDFS, Hue, Impala, Kudu	4y0

# Self-Portrait

Favorite Tech Books	
The Nature of Software Development	R. Jeffries
Clean Code	Robert Martin
The Pragmatic Programmer: From Journeyman to Master	Andrew Hunt, David Thomas
Test-Driven Development By Example	K. Beck
Don't Make Me Think: A Common Sense Approach to Web Usability	Steve Krug
Smart and Gets Things Done	Joel Spolsky
Joel on Software, More Joel on Software	Joel Spolsky

#### **Interests**

**functional programming** (typed FP/OOP), **POCs** & rapid prototyping, **framework** & **API** design, product & system design, developer experience & performance, deterministic **algorithms** & data pipelines, **music-tech** (MIDI tools, audio analysis, playlist generation, DJ/musician tooling), integrations, testing discipline (**TDD**, property-based), refactoring & **clean code**, pair programming, programming language paradigms

## **Hobbies**

**music**: playing instruments, composing, theory, programming, MIDI automation, sound engineering

apps design & development (AmplifyMusic, SoulKey game, others)

# **Detailed Experience**

## Full Stack Developer · Aperture Software

2025.May - present (0y5+)

**Amplify Music** - building a product that shows music-theory and audio features for the currently playing song, and creates collaborative, deterministic and controllable playlists for multiple users.

Integrates with Spotify and other streaming services; **for DJs**, provides an event dashboard to create a "party" with mood/filters (allowed/blocked genres, decade, favorite artists/tracks), invite via link/QR, and combine guest preferences into playlists in real time or for advance planning (e.g., weddings), **completely deterministic and transparent** 

Roles	product owner; product & tech lead; architecture; end-to-end development; third-party integrations; UX flows; release management
Tech	Java 17; Scala 2.13; React Native; Typescript; Docker; Heroku
Contributions	deterministic playlist scoring/constraints; event dashboard UX; Spotify auth and data flows; real-time preferences merge; deployment/release strategy

# **Backend Developer · Berrystack**

2024.January – 2025.April (1y4)

**Energy client** — led migration of data-processing workloads from Microsoft Synapse to Databricks to **cut costs and runtimes**;

**Designed and delivered a framework** to standardize Spark job authoring/optimization and engineering practices. Acted as technical lead across framework implementation, performance tuning, coding standards, and knowledge transfer; wrote **Python in a Java/Scala style** typed (mypy), OOP with FP (pure/immutable/lambdas), explicit contracts; no dynamic/duck-typing.

Roles	technical lead; framework implementation; performance tuning; coding standards; knowledge transfer
Tech	Spark (incl. SQL); Databricks; Python (typed; Java/Scala approach); Azure
Contributions	unified job patterns; guardrails for SQL/optimizations; migration plan & execution; developer onboarding materials

# Full Stack Developer · Visual Hive 2023.November - 2023.December (0y2)

**Visual Hive** — built an app to generate social media short clips from long videos (e.g., **podcasts**).

**User flow:** upload > Deepgram speech-to-text > transcript with phrase selection > export clips with subtitles in preset formats.

Owned end-to-end POC, API integrations (Deepgram), data modeling (Firebase), payments/subscriptions (Stripe), and UX for the clip-selection flow; wrote Python in a strongly-typed Java/Scala style (type hints/mypy, OOP with FP discipline).

Roles	end-to-end POC; API integrations; data modeling; payments/subscriptions; clip-selection UX
Tech	Vue; Nuxt; Typescript; Python (typed); Azure Cloud; Firebase; Stripe; Deepgram
Contributions	speech-to-text pipeline; transcript segmentation/selection; subscription/payments wiring; export presets with subtitles

## Full Stack Developer - Revobet

# 2023.March – 2023.October (0y8)

**Revobet** - improved and added new features for multi-tenant betting platform — full-stack work across users/authorization, SaaS integrations, new features, services integration, and bug-fixing on both backend and frontend.

Operated in a highly agile/XP environment with focus on effective & clean code practices and structured learning, handled onboarding/training for newcomers.

Roles	full-stack feature work; integrations; bug fixing; onboarding/training
Tech	Java17; Vue; Nuxt; Typescript; Kafka; Spring Framework; reactive streaming; JUnit5; Mockito; property-based testing; Vavr; Lombok; MapStruct; Material Design; Docker; Kubernetes; Maven; CI/CD (GoCD); Trunk-Based Development; XP; refactoring; MVP
Contributions	auth & multi-tenant features; SaaS integrations; hardening and refactors; testing discipline and developer onboarding

# Scala Developer · GoPro

2021.September - 2023.March (1y6)

**GoPro backend** - built and maintained data pipelines (with more advanced SQL than prior roles). Worked across Databricks, Docker, AWS, and Airflow.

Notable **pipelines** consumed Google Analytics to track cart abandonment and broader website engagement metrics. In **Scala**, implemented an end-to-end integration with the PagerDuty API that made escalation-policy changes safer and auditable: one repo per service and mandatory PR approval for any policy change.

Roles	pipeline development; services integration; reliability/performance improvements
Tech	Scala; Spark; Databricks; Docker; AWS Cloud; Airflow; SQL; Git; PagerDuty API
Contributions	GA data pipelines (cart abandonment, site engagement); PagerDuty integration (policy-as-code via PR approvals)

## Scala/Java Developer · Orange Services

#### 2017.November - 2021.September (3y11)

**Telecom big-data platform** — implemented and evolved large-scale data ingestions using a newly built in-house framework, starting from raw mobile network events (2G/3G/4G/LTE) and growing to diverse sources/sinks and well-defined marketing/ML use cases.

I worked in multiple different areas, including: framework major improvements, Spark implementation, resource management (YARN + Spark configs), pipeline definitions, scripting, platform configuration (Cloudera), Impala (AP) SQL for analysts during data discovery. Made sources/sinks **declarative** so teams implement only transformations + QA validation, standardized HDFS, Kafka, FTP/SFTP, Kudu (indexed NoSQL), JDBC; handled **non-standard I/O formats** requiring pre/post-processing (beyond **spark.load**); additional custom **cluster configurations**, automation, and cleanup scripting.

Rapid-response (COVID-19): Delivered a mobility/distancing analytics use case (GDPR-compliant, hashing + limited encryption) in 5 days (2 dev, 3 deploy/test/validate) with a two-engineer core team (plus partner teams); shipped subsequent similar use cases using the same framework speedups.

Roles	framework evolution; Spark development; cluster resource management; platform configuration; analyst SQL support
Tech	Scala; Apache Spark; YARN; HDFS; Kafka; Impala (SQL); Kudu; SFTP/FTP; JDBC; Cloudera; bash/scripting
Contributions	declarative sources/sinks; binary protocol parsing; COVID mobility/distancing analytics; unified streaming/batch via config flag

## Java Developer - Luxoft Romania 2015.November -

# 2015.November – 2017.November (2y1)

#### **HTML5** Web Interface for Hirschmann devices

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Rewrote the legacy Java Applet web UI for industrial routers/switches to HTML5, implementing pages with an **internal framework** and contributing **improvements**.

Industrial HiVision 1y8

Worked on a **network management** desktop app (topology configuration, monitoring, simplified device configuration). Delivered my first **major-release feature end-to-end**: a network events map (design + implementation). First formal Agile/Scrum experience. **Introduced Scala** to the team by implementing a Scalabased integration test automation tool.

Roles	front-end/back-end feature development; framework improvements; release feature ownership; Agile/Scrum; test tooling author
Tech	Java; HTML5/CSS/JS; SNMP; internal UI framework; Scala (integration test automation); network lab tooling; Git; CI basics
Contributions	applet to HTML5 migration; network events map feature; Scalabased integration test automation

## Scala Developer · Brainlight

2014.July – 2015.September (1y3)

**DarZar** — Worked **full-stack** across website UI, database management, and non-UI algorithms for a product crawler/ scraper/ extractor/ aggregation/ search across eshops, enabling search/filtering and price-change alerts.

Roles	full-stack development; crawler/extractor algorithms; search/filtering features
Tech	Scala; PlayFramework; DB management; scraping/ aggregation/ search/ filtering
Contributions	data acquisition + normalization pipeline; search/filtering UX; price-change alerts