## Curriculum Vitae

Andrii Nemchenko telegram: @tellnobody1

 $email: \verb"andriinemchenko@gmail.com"$ 

location: Kyiv, Ukraine

January 11, 2021

# 1 Experience

- 2020–2021 Lead Software Engineer (Scala, ZIO) at Playtech plc<sup>1</sup>
- 2017–2019 Lead Software Engineer (Scala, PureScript)
- 2014–2016 Senior Software Engineer (Scala)
  - 2013 Functional Programming Principles in Scala at  $\mathrm{EPFL^2}$
- 2013–2014 Senior Software Engineer (Java)
- 2012–2013 Software Engineer (Java)
- 2010–2012 Full-Stack Web Engineer
- 2010–2011 English level B2 (CEFR) at FSCFL<sup>3</sup>
- 2006–2012 Applied mathematics (M.S.) at TSNUK<sup>4</sup>

# 2 Public profiles

GitHub: @zero-deps and @flyingw Stack Overflow: Andrii Nemchenko

HackerRank: a nemchenko

 $<sup>^{1} \</sup>verb|https://www.londonstockexchange.com/stock/PTEC/playtech-plc|$ 

<sup>2</sup>https://www.epfl.ch/en/

<sup>3</sup>https://fcourses.com.ua

<sup>4</sup>https://www.univ.kiev.ua/en/

# 3 Open-Source Projects

### 3.1 KVS

zero-deps/kvs

Scala, Akka Cluster, ZIO, RocksDB, LZ4, Protobuf

KVS is highly available distributed (AP) strong eventual consistent (SEC) and sequentially consistent storage.

#### 3.2 Frontier

zero-deps/frontier

Scala, ZIO

High performant, pure-functional, effect-free websocket, http and udp server, http client and telegram bot.

### 3.3 Protobuf

#### 3.3.1 Scala

zero-deps/protobuf-scala-macros

Lightweight and fast serialization library for Scala based on Protocol Buffers without .proto files.

#### 3.3.2 PureScript

 ${\it zero-deps/purescript-protobuf}$ 

PureScript implementation of Protocol Buffers format.

#### 3.3.3 Scala-to-PureScript

zero-deps/protobuf-scala-purs

PureScript meets Scala: Protocol Buffers generator from Scala classes.

### 3.4 Metrics

zero-deps/metrics

Scala, ZIO, PureScript, Protobuf

Metrics/health/logs server and client for Scala projects.

# 4 Closed-Source Projects

### 4.1 Application Server

Scala, Akka Cluster, Akka Streams

Application server with streaming idea in its core. The integration layer for services providers which unifies the different APIs and respect the providers limitations guarding their services from unexpected usage. Unified services structure with akka-stream based IO layer and KVS distributed storage engine. Also plays as the service provider for itself to provide event streaming for sports betting and additional data store interfaces for the client application.

#### 4.2 Web Platform

Scala, ZIO, Akka Cluster, PureScript, Protocol Buffers

Developing and evolving Web Platform for licensees to create portals with player's account management, games hub, content-management system and integration with 3rd-party services and data providers.

It is deployed as one cluster for dozen of licensees with dozens websites. Data is stored into distributed KVS and UI is built with pure functional strongly typed language (PureScript) which produces robust and fail-safe UI. User files are handled by distributed filesystem and meta data is saved to KVS.

#### 4.3 Docs Solution

Scala, LaTeX, HeVeA

Documenting system and server for the applications with LaTeX-based tools for generating documentation in HTML and PDF formats.