Curriculum Vitae

Contact

Name	Andrii Nemchenko
Birthday	April 12, 1989
Phone	+380 (98) 446-38-22
Languages	English, Ukrainian
Email	andriinemchenko@gmail.com
GitHub	@tellnobody1
GitHub	@zero-deps
GitHub	top 100 in Ukraine
StackOverflow	top 5% overall

Education

University of Kyiv, 2006–2012

Cybernetics, 113 Applied Mathematics

- Database Systems and SQL
- Data Structures and Algorithms
- Machine Learning
- Discrete Mathematics

First Courses of Kyiv, 2010–2011

- English B2 (upper intermediate)

École de Lausanne, 2013

- Function Programming

Checkmarx, 2020

- Application Security and Secure Coding Training

Diia, 2020

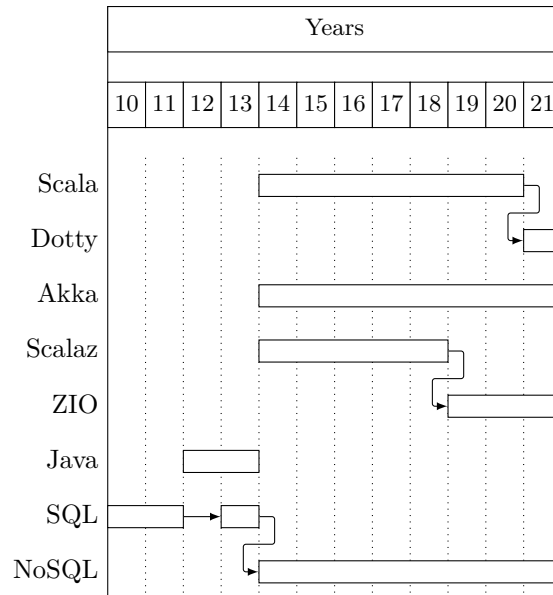- Blockchain and Cryptocurrencies
- Computer Driving License

Princeton University, 2021

- Bitcoin and Cryptocurrency Technologies

Autodidacticism

- Homotopy Type Theory

- Type Theory

- Category Theory

- Dependent Types

Skills

	Years											
	10	11	12	13	14	15	16	17	18	19	20	21
Scala												
Dotty												
Akka												
Scalaz												
ZIO												
Java												
SQL												
NoSQL												

Additional languages PureScript, JavaScript, Rust, Dart, Idris.

Work Experience

2020–2021, Team Leader

Stack: Dotty, ZIO, NoSQL

Metrics Server Metrics/health/logs server and client.
Scala, ZIO, PureScript, KVS.
zero-deps/metrics

WebSocket Server High performant, pure-functional, effect-free websocket, http and udp server, http client and telegram bot.
Scala, ZIO.
zero-deps/frontier

Binary Protocol Lightweight and fast binary serialization.
Dotty Macros, Protocol Buffers, PureScript, LaTeX.
zero-deps/proto.

2019–2020, Developer

Travel App

Stack: Scala, ZIO, NoSQL

All-in-one application for travelers: booking, tickets, car rental, navigation, guides.
Scala, ZIO, KVS

2017–2019, Developer

Stack: Scala, Akka, NoSQL, PureScript

Web Platform   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.
Scala, ZIO, Akka Cluster, PureScript, KVS.

Key-Value Store   KVS is highly available distributed (AP) strong eventual consistent (SEC) and sequentially consistent storage.
Scala, Akka Cluster, ZIO, RocksDB.
zero-deps/kvs

2014–2016, Developer

Stack: Scala, Akka, NoSQL

Application Server   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.
Scala, Akka Cluster, Akka Streams, KVS.

Documentation Solution   Documenting system and server for the applications with LaTeX-based tools for generating documentation in HTML and PDF formats. Scala, LaTeX, HeVeA.

2013–2014, Developer

Stack: Java, Spring, SQL

Gaming Web Portal

2012–2013, Developer

Stack: Java, GWT

Mobile Gaming Platform

2010–2012, Developer

Stack: Web Backend, SQL

Social Network

2009–2012, Student

Stack: Java, C#, C++, Pascal

Cancer Detection Software   Detection of breast cancer on early stages using machine learning algorithm modified to work with small amount of training data.

Optimal Irrigation of Soil   Calculation and visualization of optimal irrigation of soil for selected plants to effectively use water supply in rainless regions.