

# Curriculum Vitae

## Contact

Name	Andrii Nemchenko	GitHub	@tellnobody1
Birthday	April 12, 1989	GitHub	@zero-deps
Phone	380 (98) 446-38-22	GitHub	top 100 in Ukraine
Languages	English B2, Ukrainian	StackOverflow	top 5% overall
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## Education

### University of Kyiv, 2006–2012

#### Computer Science and Cybernetics, 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 Principles in Scala

### Checkmarx, 2020

- Application Security and Secure Coding Training

### Diia, 2020

- Blockchain and Cryptocurrencies
- Computer Driving License

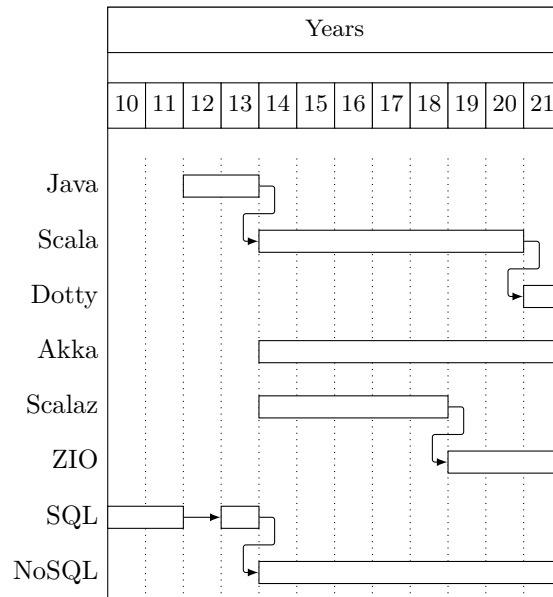
### Princeton University, 2021

- Bitcoin and Cryptocurrency Technologies

## Autodidacticism

- Homotopy Type Theory
- Type Theory
- Category Theory
- Dependent Types
- Zionomicon

## Skills



**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

**Stack:** Scala, ZIO, NoSQL

**Travel App** All-in-one application for travelers: booking, tickets, car rental, navigation, guides.

### 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.