

Andranik Muradyan

github | email | homepage | Yerevan, Armenia

Career

Software engineer - Grid Dynamics

08.05.2025 - current

Supporting a recommendation engine in Scala 2 on PredictionIO for large e-commerce platforms, extending the API for a more granular search. Documenting behavior in an effort to later write the next version of the service in Java 21, prototyping APIs, setting up meetings.

Workshop leader - TUMO Yerevan

01.05.2025 - 31.05.2025

Tech used: JS, Deno

A workshop for high school students on building programming language. Shvi, the language, is inspired by LISP and is a simple notation for writing music. During the workshop, students moved through each step, supported with reading material and guided by tests, gradually adding features and building a simple interpreter. The course is designed in a way that each step produces a tangible result in the real world - sounds in our case. It is open-ended from some point, to allow for creativity and exploration both musically and engineering wise /some students added vibratos and lambdas/.

Freelance

01.08.2024 - 08.05.2025

Scrapper in Python **Tech used:** Python, BeautifulSoup, PostgreSQL

Parsing Armenian laws and regulations from the official website of the Republic of Armenia to allow the users to search for certain laws and regulations by keywords. The project is in the early stages of development and is being done in Python.

Scrapper in Scala **Tech used:** Scala 3, Cats, ScalaTest, PostgreSQL

Scraping certain e-shops for hot deals and sales. The frontend for this project is Telegram, so the admin panel, the staging channel and the actual channel are all in Telegram.

Full-stack developer in JS **Tech used:** React, Node.js, Next.js, PostgreSQL, Prisma

A shop, providing a wide range of printing services, like stickers, boxes, prints on clothes, etc. The project is in the late stages of development and needs supervision and some refactoring. The main goal is to make the code more readable and maintainable.

Senior Scala engineer - DataArt Armenia

04.04.2022 - 18.07.2024

Tech used: Scala 2.13, Akka, Play, tAPIr, AWS SQS, IBM MQ, Cats

Overall I've spent about two years in two teams on a project in travel industry, automating cruise reservation flows across multiple agents and elements.

My main contribution to the project was a module to search plane tickets. I've managed to maintain a well-tested and coherent codebase and an structured repository, and learned that frequent demos calm the worried mind and help avoiding *dirty* estimates. Our team was able to experiment and agree on what's good or bad, so we were able to affect our modules of the project both technically /code style and structure, tooling, practices/ and process-wise /CI\CD, branching strategy, code review, .../.

Soon after, I took up the role of the **team lead** of a team of five /team 1/ and led it for three months. The team was in charge of several modules central to the operation, both semantically and topologically. I tried to get *better code reviews* via pair programming and a *clearer* information flow via more inclusive requirement gathering in attempt to address system correctness issues. These, along with a few others ideas, did not work out due to different socioeconomic reasons. Nevertheless, the team was able to maintain a deliverable flow suiting the needs at the moment.

For the last two months, I've been primarily engaged in maintenance tasks, frequently collaborating with a colleague.

Technical Trainer - Quality Testing Lab

01.03.2020 - 01.06.2022

Tech used: Java/8/ as the main programming language, SerenityBDD, Gherkin, Cucumber, Selenium, Browserstack

Tasks: Design and implementation of a number of testing frameworks for online shops. Started as simple Selenium tests and gradually moved to SerenityBDD. Compilation of Gherkin scenarios from user requirements. Integration with Browserstack Development of toy projects in Java for exercising with juniors.

Freelance

01.02.2018 - 01.03.2020

Tech used: Scala, Akka HTTP, MQL, Javascript, Python, Cython

Tasks: Design and implementation of the backend for a ticker data aggregator from different Meta-Trader4 vendors in Scala and MQL, processing Excel workbooks with financial data from different providers /normalization, exporting to PDF/ in Python. Validation of a framework for testing collateralized loan obligations and implementation of tests for CLOs in that framework.

Co-founder and senior developer - Praddicts CJSC

11.11.2016 - 01.02.2018

Tech used: Java as the main programming language, Scala, JavaScript. Spring, PostgreSQL, MongoDB, Apache Spark, Apache Kafka, JenkinsCI, RabbitMQ

Tasks: Design and maintenance of a REST API. Integration of third-party data sources. Doing all sorts of small things with techs above.

Senior software developer - SCDM

11.11.2014 - 11.11.2016

Tech used: Java as the main programming language. Java EE, Oracle RDBMS /PL SQL/, JSP

Tasks: Integration with a finmath library of a peculiar design. Integration with a number of asset-related data providers. Database design and development.

Freelance every now and then

01.09.2009 - 11.11.2014

Tech used: C#, C++, Objective-C, NSIS, MySQL

Tasks: Employee DB /MySQL/ in C#. Chat module in Objective-C based on XMPP protocol /Facebook chat, GTalk, custom chat with configurable XMPP settings/. Media player with a 360 plugin based on VLC using QT and C++. Installer with crypto plugins in NSIS for the player.

Software developer - Hitegrity LLC

01.12.2007 - 01.09.2009

Tech used: C/C++ as the main programming languages /COM, DCOM/

Tasks: Porting OmniTrust Protected Browser project to 64 bit. Implementation of features such as notes and highlighters for the editor of Castle's FaxPress project. Participated in the ProtectFile project for SafeNet-Inc.

Software developer - WestSoft LTD

01.07.2007 - 01.12.2007

Tech used: C++ as the main programming language /ATL, STL/, MySQL

Tasks: Design and implementation of an ORM for MySQL\C++ for an ERP application /early stages/. Library for custom report generation in rich text format.

Software developer - Smart-Tech LTD

25.12.2006 - 21.06.2007

Tech used: Erlang as the main programming language, Mnesia as DB, Yaws as webserver

Tasks: Integration for a number of Armenian banks with ARCA card processing.

Education

PhD /unfinished/

Department of Distributed and Dependable Systems, Faculty of Mathematics and Physics, Charles University in Prague /Ph.D./ 2013-2014

Courses: Concepts of Modern Programming Languages /Groovy, Scala, Io, .../, Embedded and Real-Time Systems /RTEMS/, System Behavior Models and Verification /PROMELA, NuSMV/

Projects during PhD **Tech used:** Java, Xtext, Xtend, EMF, Alloy /relational modeling language/

Tasks: Implementation of the scheduler in jDEECo. Vehicle routing model /in Java, based on DEECo platform/. DSL design for CBSE

Bachelor and Master

From 2004 to 2008, I pursued my Bachelor's degree in Computer Science at The State Engineering University of Armenia in Yerevan, focusing on Cryptographic Algorithms and Information Security.

I, then, continued my education at The National Academy of Sciences of Armenia in Yerevan, where I earned my Master's degree between 2008 and 2010, centering my studies around Information Theory.

Languages

- Armenian - native
- Russian - advanced
- English - upper-intermediate