Anatolii Kmetiuk

✆ +41782440304
✉ anatoliykmetyuk@gmail.com
⌨ www.akmetiuk.com
◉ anatoliykmetyuk
in akmetiuk

Expertise

Tech Domains	○ Backend Web Development ○ Compiler Engineering ○ Machine Learning ○ Business Processes Automation
Soft Skills	○ Project Management ○ Event Organisation ○ Mentoring programming students ○ Strategic Communication and Tech Community Management ○ Technical Writing ○ Public Speaking
Languages	○ Ukrainian and Russian: native bilingual ○ English: fluent ○ French: intermediate ○ Japanese: basic

Technologies

Languages	Scala, Python
Scala Stack	Scala 3, Typelevel Stack
ML Stack	Scikit-Learn, XGBoost/LGBM and other decision tree models, Polars, Seaborn
Webdev Stack	Next.js/Gatsby.js (React), Firebase, Docker

Work Experience

Jan 2022 - Apr 2024

⚙ **Developer Relations Manager**, 🏛 *Scala Center, EPFL*, 📍 Lausanne, Switzerland, 🔗 https://epfl.ch.
At the Scala Center, the organisation that coordinates the Scala community and promotes the language, I am responsible for community projects aimed at the growth of the language and its ecosystem. I am also involved in fundraising projects to help fund the Scala Center. Some projects I lead and organized:

○ **Governance**
  - **Scala Improvement Process Chair** - I'm managing the Scala improvement process where stakeholders decide what features get included in Scala.
  - **Fundraising** - I'm planning and implementing various initiatives to attract funding for the Scala Center.
○ **Local Community Building**
  - **Scala in Science** – developed and organised a semesterly workshop for EPFL students, aimed at popularising Scala among science students in a gamified way. It was attended by 25 people over the course of a year.
  - **Scala Lunches** – organized a monthly event at EPFL for students and staff to share lunches together while listening to lightning talks. Over the course of 6 months, we had a regular attendance of 20-30 people with 1-2 speakers per event.
○ **Community Education and Contribution** to Scala
  - **Compiler Academy YouTube Channel** - educational channel with high-quality videos on the Scala 3 compiler design – 5.3k views, 330h view time, 500+ subscribers, 14 videos in one year.
  - **Google Summer of Code** – lead it twice, giving opportunity to contribute to the Scala ecosystem to 11 mentees.
  - **Let's Talk about Scala 3** – lead the project aimed at production of educational Scala 3 videos.
○ **Scala Meetups and Sprees** organisation – Scala.io Spree, WAW Scala Spree, Scala Days 2023 Spree, SF Scala Meetup Participation and Spree.
○ **Business Processes Automation** –automated internal Scala Center and LAMP business processes, bringing down time requirement on one project in particular from 12 hours to 20 minutes every 3 weeks.

Apr 2019 - Jan 2022	⚙ **Compiler Engineer**, 🏛 *LAMP, EPFL*, 📍 Lausanne, Switzerland, 🔗 https://epfl.ch. At LAMP, the research lab at EPFL behind the Scala language, I was working on the Scala 3 compiler, helping prepare its first stable release. ○ **Enums Feature** - implemented the first version in Dotty. ○ **Porting from Scala 2 to Scala 3** – ported the Li Haoyi stack of libraries. ○ **Release Coordination** – coordinated the first stable release of Scala 3. ○ **Compiler Academy** – developed a monthly event that gave the Scala 3 community a well-defined pipeline to start contributing to Scala 3. ○ **Business Processes Automation** – set up a new CI, testing infrastructure for the Scala 3 GitHub repository, as well as the release schedule. ○ **Issue Fixing** – fixed a number of issues in the compiler. ○ **Mentorships** – mentored 8 students over the course of 4 years on their semester projects.
Sept 2018 - Jan 2019	⚙ **Software Engineer**, 🏛 *Secure Code Warrior*, 🔗 https://securecodewarrior.com. Secure Code Warrior is a gamified educational platform where people can learn secure web application programming by solving web application hacking challenges. I developed 25 web applications for such challenges using Scala Play and the Typelevel stack.
Jun - Jul 2018	⚙ **Conversation Systems AI Engineer**, 🏛 *Botelz*. Botelz was a startup for booking hotels. I developed a customer support chat bot for them that helped their customers with their questions. I used Stanford NLP library for intent analysis, Python, Scala and IBM Watson cloud solutions.
Oct 2017 - May 2018	⚙ **Web Application Engineer**, 🏛 *Zoteca, Inc.*, 🔗 http://www.zoteca.com. For the Zoteca consultancy, I was developing an online store using Scala, Scala.js and the Typelevel stack.
Oct 2017 - Nov 2017	⚙ **Data Scientist**, 🏛 *Indalyz Monitoring & Prognostics GmbH*. This startup contracted me to develop a machine learning model to detect health insurance fraud. I used Docker, R, PostgreSQL and Scala for data exploration and model development.
Sept 2016 - Dec 2016	⚙ **Data Scientist**, 🏛 *Sparse.Tech*. I worked for this consultancy to build a machine learning model for sentiment analysis of Twitter and blog posts. I implemented: ○ ML Models for sentiment analysis using latest Deep Learning tech – LSTM, CNN, RNN – via Keras. ○ Applications for data annotation, visualisation and mining in Scala.
Oct 2015 - Jan 2017	⚙ **Software Engineer**, 🏛 *Delftware Technology BV*. I developed an application that generated PowerPoint presentations from a template. I used Scala for this project.
Apr 2015 - Feb 2016	⚙ **Compiler Engineer**, 🏛 *Delftware Technology BV*, 🔗 scala-subscript/subscript. I worked on SubScript, an extension for the Scala 2 compiler that adds a process algebra syntax to the language. I defined a custom parser and a compiler for the SubScript language, and integrated them into the standard Scala compilation chain using SBT.
Jun 2014 - Aug 2014	⚙ **Google Summer of Code Intern**, 🏛 *Scala Team*, 🔗 https://goo.gl/q3MiPa. During my work on GSoC 2014, I integrated SubScript, the process algebra implementation, with Akka, the actor model concurrency library for Scala
2013 - 2014	⚙ **Freelance Software Engineer**. I was freelancing part-time during my university days. I did small freelance projects in Java (J2ME, for old mobile phones), PHP (Wordpress plugins development), and Unity3D (Games and an Augmented reality app for Android).

Open Source Experience

2022	▤ **Simple Rockets Compiler**, ⚙ *Author*, 🔗 scalacenter/simple-rockets-compiler. A compiler to program the flight of a rocket in the Simple Rockets game. This project is used by the Scala Center at EPFL to conduct the Scala in Science workshop.
2020	▤ **com-lihaoyi Stack**, ⚙ *Contributor*, 🔗 com-lihaoyi. The com-lihaoyi stack includes various libraries for working with the file system and the web.
2019	▤ **Scala 3 Compiler**, ⚙ *Core Contributor*, 🔗 lampepfl/dotty. The Scala 3 compiler, also known as Dotty.
2018	▤ **Thera**, ⚙ *Author*, 🔗 anatoliykmetyuk/thera. A static website generator for Scala, similar to Hakyll and Jekyll.
2015	▤ **JAnki**, ⚙ *Author*, 🔗 anatoliykmetyuk/janki-gen. A library for Japanese language learners that generates Anki flashcards from a user-provided Japanese text.
2014	▤ **SubScript**, ⚙ *Core Contributor*, 🔗 scala-subscript/subscript. A Scala language extension that adds process algebra syntax to the language. The extension allows programmers to describe concurrent software using a domain-specific language specifically designed for that purpose.

Publications and Educational Materials

2022   ▶ How to Read the Dotty Codebase   % https://youtu.be/XsxcaE29AN4

2018   📕 Mastering Functional Programming   🏛 Packt Publishing   % https://goo.gl/wEsCFL

2017   📕 A Story of One Library: Introduction to Functional Architectures   % https://shorturl.at/CGQU7
      ▶ Introduction to Type Classes   % https://youtu.be/XsxcaE29AN4

2016   📰 van Delft, Andre, and Anatoliy Kmetyuk. "Declarative Programming with Algebra." International Symposium on Functional and Logic Programming. Springer International Publishing, 2016. % https://goo.gl/T6FlxP

Education

Feb 2021 -   🏛 **InnoSuisse, EPFL**, 📍 *Lausanne, Switzerland*, 🎓Impact Entrepreneurship Bootcamp.
Dec 2021

Sept 2011 -   🏛 **National University "Odessa Law Academy"**, 📍 *Odessa, Ukraine*, 🎓MSc of Law.
May 2017