

Thanh Le

Passionate, professional senior software engineer with strong architecture skills and the ability to learn quickly. Committed high quality, reusable, testable code and user experience that will stand the test of time. Love functional programming and open source.

Experience

3/2023 - Present **Software Engineer - Recorded Future:**

Provide an accessible, coherent, and scalable representation of the ever-growing Security Intelligence Graph.

1/2023 - Present **Lichess:**

Lichess.org is a free/libre, open-source chess server powered by volunteers and donations. I started as a contributor for **Scalachess**, and then got invited to the team and expanding my area to few different area.

- **Scalachess:** The chess logic library of lichess
 - Main maintainer of the library.
 - Refactor the internal logic by using **Bitboard** technique without changing the external Api
 - Further bug fixes, optimization and features.
- **lila:** Main server of lichess
 - I'm a regular contributor that focus on back-end, refactoring, and performance optimization.

6/2021 - Present **Grokking Vietnam:**

Grokking Vietnam is a nonprofit organization dedicated to building and supporting a high-quality community of software engineers in Vietnam.

- Contributor for our **newsletter**
- Leading a team of five people on **Grox project**
- Program Director since 7/2022

4/2020 - 3/2023 **Senior Software Developer - The Techno Creatives:**

- **Tyri IntelliLight:** A project includes mobile apps and back-end for setting up, controlling and sharing Tyri products with Bluetooth mesh.
 - Responsible for the back-end using Kotlin, **Arrow**, **r2dbc**, PostgreSQL, Redis.
 - Develop **Bluetooth Mesh** module for **Beckon-Android** library.
 - Use **Kotlin multiplatform mobile** and **SqlDelight** to implement the Database layer for IOS and Android Apps.
- **rentr.se** - A trailers rental service.

- A part of a back-end team using Rust, Kotlin, GraphQL, RabbitMQ.
- Implement a POC of **Divvun Spell Checking** plugin for **OmegaT app**.
 - Rust, Java, Kotlin, **JNA**
- A part of Android hiring team which includes: Screen candidate profiles, review assignments and technical interviews.

8/2018 - 4/2020 Software Developer - The Techno Creatives:

Starting as an Android developer, I was responsible for the architecture design for most Android projects. Introduced functional programming, MVI architecture and other design patterns to our team. During this period, I started to become a multi-discipline developer by working with different languages and products.

- **Axkid Connect Android App**
 - Work with firmware team on debugging and protocol
 - Responsible for App architecture and BLE integration.
- **Beckon-Android** - A BLE library for Android.
 - Design and implement the library
 - The library was designed to be used in **Axkid Connect Android App** and then other teams adopted it for other BLE related projects such as **Weret Android App**.
- **Gut** - A Git multi repo maintenance CLI tool.
 - The app is being used widely in **Divvun organization**
- **24rental** - an MVP of trailer rental service.
 - Implement back-end using NodeJS, Typescript, PostgreSQL

6/2016 - 6/2018 Senior Android Developer - Localift(Remote Position)

Localift was an Australian startup which works with smart cities, companies and communities to deliver trusted shared mobility solutions, reducing congestion, economic costs and environmental impacts.

- The main responsible for the development Android App. App features include: ride tracking, ride scheduling, mapping integration (geocoding, place search, map interactions), friend lists, groups, messaging, push notifications, calendar integration, Facebook integration.
- After May 2017, including the responsibility for maintaining, deploying back-end (nodejs) and IOS app (Swift) after the CTO resigned.

11/2015 - 5/2016 Android Developer - Commonwealth Bank Vietnam

- Develop the first MVP version of a banking application for Android which is **TymeGlobal** now.

1/2015 - 11/2015 Senior Android Developer - Evil Genius Technologies

- Develop <http://www.followupboss.com> app on Android.

9/2013 - 12/2014 Android Developer - Saritasa Vietnam

- Various Android projects

5/2011 - 9/2013 Freelancer Android Developer

- Various Android projects

- Develop games and applications for different mobile platforms in C, C++, J2ME, Android, IOS.

Side Projects and Open Source

- Side Projects**
- Grox:** Building an Interpreter in Scala 3 by using functional programming techniques(Following **Crafting Interpreters book**)
 - Compilers:** A place for me to learn/experiment with interpreters/compilers, type theory and functional programming.
 - RxArrow:** **RxJava** extensions for **Arrow**'s Data Types
- Open Source**
- Arrow - Functional library for Kotlin:** I was a contributor and a member of the maintainer comitée.

Programming Languages

As a multi-discipline developer, I am fairly proficient in several programming languages. In the last few years I have been using these programming languages in professional or personal context(in alphabetical order): Elm, Haskell, Java, Javascript, Kotlin, Lua, Python, Rust, Scala 2, Scala 3, Swift, Typescript.

Human Languages

- Vietnamese (native speaker)
- English (Fluent)

Education

2007-2011 **Bachelor of Software Engineering;** FPT University (Hanoi - Vietnam)

Academic Honors and Awards

- 2009 Regional ACM/ICPC Competition at Phuket/Thailand - Encourage Prize
- 2009 Vietnam National ACM/ICPC Competition - Second Prize
- 2008 Vietnam National Mathematics Olympiad for student - Third Prize
- 2007 Full Scholarship at FPT University
- 2006 Took part in the Vietnam National Mathematics Olympiad