André Videla

Education

2020 - current	PhD in computer science at Strathclyde, supervised by Robert Atkey & Conor McBride.
2019 - 2020	Msc(res) at St.-Andrews University
2017 - 2019	Licence en informatique (Bachelor), Université de Franche-Comté
2012 - 2016	Attended Bachelor in Computer Science at EPFL (131 credits)
2007 - 2012	Maturité Gymnasiale (physique et application des math)

Work Experience

Oct. 2020 - Current	**Functional Programming consultant (Remote)** I deliver services for companies working with functional programming technologies such as Haskell and Idris. Focused on Backend development, research software and state-of-the-art libraries, such as implementing Open games, or implementing a string-diagram editor.	Haskell, Idris, Functional Programming, Category Theory
Feb. 2019 - April 2020	**Software Engineer at Statebox (Remote)** Development and maintenance on a Purescript web application. Development, maintenance and design of Open Source libraries in Idris including implementations and proofs for protocols such as multibase and multihash. Participated in the development of the core engine implementing formal definition for categories and their properties. Maintainer of typedefs, a protobuf competitor leveraging the algebra of types.	Idris, Purescript, Category theory, Type theory
Apr. 2018 - Dec. 2018	**Backend Developer at Bity SA (Neuchatel)** Lead a new project from scratch to production which aimed to provide a common API for interacting with cryptocurrency nodes. The goal was to enable easy management of additional cryptocurrencies and provide strong guarantees about the business logic by leveraging the Haskell type system and using thorough testing practices.	Haskell
Oct. 2017 - Apr. 2018	**Mobile developer Consultant (Geneva)** Supported the development of iOS Apps for Krown a consulting company and Gookers, a service startup. I focused on writing UI code for two Uber-inspired apps using real-time network communication and location services.	Swift, RX-Swift
Oct. 2016 July. 2017	**Software Engineer at Sicpa (Lausanne)** Designed, developed and maintained internal and public APIs and libraries for iOS. Developed and maintained small and medium scale iOS apps using agile Scrum.	Swift, Obj-C
Sep. 2012 - Feb. 2014	**Mobile developer at Dischan (Remote)** Worked on Android port of the game engine including writing a parser for a DSL, asset management, audio management, 2D scene composition and rendering, UI management. As well as doing QA for other projects of the company.	Java

(Programming) Languages

Mastery	Idris, Haskell	French:	Mothertongue
Excellent	Scala, Swift, Agda	English:	Fluent
Intermediate	Clojure, C, JS	Spanish:	Good speaker
Beginner	Coq, Rust	Japanese, Italian:	Basic knowledge

Talks and publications

Jan. 2024	Binding Syntax for Dependently-Typed Programs	Compiler, Idris
Oct. 2023	Interactive programs using monads on containers	Type Theory, QTT
May. 2023	Programming with pointers for type theorists	Type Theory, QTT
Mar. 2022	Lenses for Composable Servers (Arxiv)	Category Theory, Idris
Mar. 2022	Boilerplate-free servers using lenses, MSP 101	Idris
Oct. 2021	Dependent Lenses for servers, SPLS 2021	Category theory, Idris
Jul. 2021	Optics for servers, a library for web servers using lenses	Idris
Mar. 2020	PLUG talk about my research on linear types and performance	Idris