



Application Andre Videla

1 message

André Videla <andre.videla@gmail.com>

Tue, Jan 29, 2019 at 2:45 PM

To: act2019school@gmail.com

Greetings,

I would like to apply for ACT2019 summer school. Indeed this opportunity is extremely timely for me as I embark in a new venture in research. Indeed I'm applying for a Master of Philosophy in St Andrew to work on linear types and their uses, if all goes well I should finish it by summer 2021. I currently work at Statebox, a company where we already use category theory as a mathematical foundation to build our products. It is almost certain that I could be able to attend at Oxford this summer.

A Brief statement:

I am interested in participating in ACT2019 summer school because I want to solidify my knowledge of category theory in order to use it in my research domain. I would be very much interested in Pieter Hofstra's work on computability since it closely matches my research topic with linear types where we explore the semantics of linear types in order to track computation cost and computation complexity. This is also relevant to my current work at Statebox which uses monoidal categories to model petri nets computation. We also have another product TypeDef which aims to be a language that define portable program using type definition as polynomial functors living in a cartesian closed category. Participating in ACT2019 school will help further develop those idea and find solutions to concrete problems we face today. Miriam Backens' work seem particularly interesting as quantum mechanics is a recurring topic but it whole fully unexplored in the context of developing dependent and linear type systems. Finally as a functional programmer I am very interested in Bartosz Milewski teaching about profunctor and optics. This is also a recurring topic in software engineering that will certainly help me communicate better the uses of category theory to an uninformed audience.

You will find my CV as well as a recommendation letter from my former professor of logic in attachment.

Best regards,

André Videla

2 attachments**cv.pdf**
35K**recommendationLetterVidela19.pdf**
304K

André VIDELA

FUNCTIONAL PROGRAMMER / ASPIRING TYPE THEORIST

PERSONAL DATA

PLACE AND DATE OF BIRTH: Switzerland | 20 August 1991
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GITHUB: <https://github.com/andrevidela>

BIO

Fascinated by programming languages, I seek excellence, correctness and beauty in code. I work a lot in Idris and Haskell trying to build real-world software out of provable programs. My deepest interests lie in type systems and programming language theory and design. In my free time I organise the [Software verification meetup](#) in Lausanne and I play video games.

WORK EXPERIENCE

APR. 2018	Backend Developer at Bity SA (Neuchatel)	
DEC. 2018	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 - JAN. 2018	Mobile Developer at Krown SA (Geneva) Developed and maintained iOS app for business customers	Swift, Rx
OCT 2016 - JUNE. 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
MAR. 2016	Release of Arcaea for Android and iOS by lowiro (Remote) Designed and implemented a DSL to describe music notes in 3D and developed parsing and checking tools	C++, Javascript
SEPT 2015 - JULY 2015	Internship at KABOTIP, Tokyo (Remote) Developed micro-services in Clojure for the Kabotip platform. Namely the mobile notification service and the automatic moderation tool for user comments.	Clojure, Redis

EDUCATION

2017 - 2019	Licence in Computer Science at Unidistance (remote)
July 2017	EUTypes summer school (Coq, Agda, HoTT, λ -calculus)
May 2017	Introduction to Logic by Stanford University on Coursera. statement of accomplishment
2012 - 2016	Attended Bachelor in Computer Science at EPFL, Lausanne Collected 131 credits
2007 - 2012	Maturité Gymnasiale (physique et application des math)

LECTURES AND PROJECTS

ONGOING	Reading <i>Quantitative Type Theory</i> by Robert Atkey	Type Theory, Idris 2
FEB. 2018	Interviewed for the Corecursive podcast: 007 - Total Programming Using Swift with Andre Videla	Swift, Idris
DEC. 2017	Gave a talk about Idris and dependent types at the Software verification meetup.	Idris
OCT. 2017	Read <i>State Machines All The Way Down</i> by Edwin Brady	Idris
SEPT. 2017	Read <i>Kleisli arrows of outrageous fortune</i> by Conor McBride	Haskell (SHE)
AUG. 2017	Presented work on <i>Total Parser Combinators</i> by Nils Anders Danielsson for a small local conference (VOD on youtube)	Idris, Agda

(PROGRAMMING) LANGUAGES

Mastery	Swift, Java	FRENCH:	Mothertongue
Excellent	Scala, JS, Obj-C, Haskell	ENGLISH:	Fluent
Intermediate	Idris, Clojure, C++, C, C#	SPANISH:	Good speaker
Beginner	Coq, Rust, Agda	JAPANESE:	Basic knowledge

Recommendation of André VIDELA

I, Alain GIORGETTI, assistant professor, write this recommendation letter as teacher of André VIDELA. From February to August 2018, André VIDELA has successfully followed my course on formal methods. The course is an undergraduated initiation to mathematical logic, inductive types, inductive proofs and the theory of polymorphic types.

During this course, André VIDELA has shown advanced skills, asked relevant questions, answered other students on the course forum, and connected the course with his knowledge in Idris.

Therefore, I recommend the admission of André VIDELA in a Masters program in logic, type and category theory.

Besançon, January 16th 2019

Alain GIORGETTI



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