M Gmail   **Applied Category Theory <act2019school@gmail.com>**

Applied Category Theory 2019 School

1 message

Jonathan Lorimer <jonathan_lorimer@me.com>   Wed, Jan 30, 2019 at 4:43 PM
To: act2019school@gmail.com

1. Traversal optics and profunctors (I emphatically prefer this topic as I have a background in programming and Haskell)
2. Toward a mathematical foundation for autopoiesis
3. Complexity classes, computation, and Turing categories
4. Formal and experimental methods to reason about dialogue and discourse using categorical models of vector spaces

Availability: I am available to come to Oxford for the two weeks

how can this school help in your career?

I am a self taught programmer who is interested in functional programming and category theory. Professionally I do web development, but I try and employ functional concepts everywhere I go. As I understand it, category theory is about representing the patterns and relationships between entities, and abstracting out useful generalizations. This is particularly applicable in the field of programming, and informatics. I would love to be able to investigate the application of something as theoretical as category theory to something as practical as technology development. I think that my background in philosophy, and success as a programmer demonstrate the useful relationship between the theory and application in programming.

Expect my letter of recommendation to follow.

2 attachments

📄 **ACT2019.docx**
    14K

📄 **CV 2019.pdf**
    60K

Jonathan Lorimer

250-418-0784
jonathan_lorimer@mac.com
236 Wychwood Ave, M6C 2T3 Toronto, ON, Canada
LinkedIn | Github | StackOverflow

Skills

Front-end: React and Vue, Redux, REST and GraphQL, Test Driven Development

Back-end: Node.js, PostgresQL, MongoDB, Haskell

Summary

I am a Philosophy honours graduate, my focus was in Epistemology, Formal Logic, and Philosophy of International Law. I am interested in functional programming (I am currently teaching myself Haskell) and the academics that underpin it; primarily category theory. I am looking for opportunities that involve coding in a functional capacity.

Work Experience

Ecobee   Jan. 2019 - Current
Web Developer - React, Redux, GraphQL

Purpose Advisor Solutions   Sept 2018 - Dec. 2018
Full-Stack Developer - EJS, Node.js, Python, Django

Lighthouse Labs   Aug 2018 - Current
Mentor + Instructor

TheRedPin   Apr-Jun 2018
Full-Stack Developer - Vue.js, PHP, PostgresQL

Projects

Autodidact
Vue.js | GraphQL | MongoDB

A self learning app that I am currently building. The purpose of this project was to learn GraphQL. One of the most exciting features I built is a recursive component for rendering a tree-structure of unspeficied depth, in order to represent parent child relationships between pre-requisite learning materials.

Newport Realty Calculator
Vanilla JS | PWA | AWS

A simple commission calculator for real-estate agents. I used this project to learn how to build a progressive web app and host a site on AWS. On AWS I used a basic EC2 instance and a nameserver, and used an SSL certificate for HTTPS. I used a manifest.json and a service worker for caching, in order to allow the app to be downloaded onto a phone and operated offline.

Education

University of Victoria   2015-2017
Bachelor of Arts | Honours Philosophy
- Varsity Rugby Player
- Varsity Honour Roll & Honour Roll

Lighthouse Labs   Jan-Mar 2018
Web Development Bootcamp

Lighthouse Labs   Oct-Jan 2019
Blockchain Development Course

An explanation of any relevant background you have in category theory or any of the specific projects areas

I have read *Conceptual Mathematics: A First Introduction to Categories* and followed all of Bartosz Milewski's category theory lectures on youtube. Additionally, I am completing the FP Complete Haskell Course, which is a guided reading of *Haskell from First Principles*. Haskell doesn't suffice to teach category theory, but it draws a lot of its ideas from CT, an example would be Edward Kmett's implementation of a lens library.

The date you completed or expect to complete your Ph.D and a one-sentence summary of its subject matter.

I have not completed a Ph.D, and have no plans of completing one yet. I completed my undergraduate degree April of 2017.