2017–present

2016

Profile

A high powered math, crypto and data nerd, with a hint of policy wonk, who is happiest using critical thinking and creative problem solving skills to do the impossible. In addition to a strong attention to detail, and the patience to tackle large and diverse projects, skills include:

- Thorough comprehension of blockchains, smart contracts, anonymization
- Solid understanding of cryptographic primitives and protocols
- Comfort with the design of technical systems to implement policy goals
- Excellent written and oral communication skills

Goals

I enjoy working in a start-up environment, where my deeper skills can

Work Experience

CHIEF SCIENTIST AND CO-FOUNDER: SHYFT NETWORK INC. 2017–present

- Designing the cryptographic protocols for a compliant identity blockchain
- Drafting technical standards to ensure compliance and auditability of user operations
- Liaising with financial executives and government officials on desired and necessary system features

CHIEF SCIENTIST AND CO-FOUNDER: BLOCKUNITY INC.

• Evaluating the needs and mathematical/technical feasibility of various blockchain projects for the development of subsidiaries

CHIEF SCIENTIST: DECENTRAL

- Provided mathematical expertise and technical comprehension of blockchain cryptosystems and protocols
- Developed proof of concept back ends reproducing all critical functions of major Canadian capital markets
- Designed systems for the incorporation of identity and messaging into a blockchain wallet

HEAD OF DATA SCIENCE: ADCHEMIX INC.	2014 - 2016
DATA SCIENTIST: GRANIFY	2012 - 2013
DATA SCIENTIST: KONTAGENT SOCIAL ANALYTICS	2009 - 2012
Researcher: Caliope Music Search Inc.	2008-2009
Post-Doctoral Fellow: Fields Institute/York University	2007 - 2008

Education

Ph.D.	Mathematics	University of Toronto	2007
M.Sc.	Mathematics	University of Toronto	2002
Hon.B.Sc.	Mathematics	University of Toronto	2001

Publications

1. K. T. Coward, G. A. Elliott, C. Ivanescu: The Cuntz semigroup as an invariant for C^* -algebras, Journal für die reine und agnewandte Mathematik (Crelle's Journal) 623 (2008), pp 161–193

Volunteer and Community Service

SITE 3 COLABORATORY CENTRE FOR ART AND TECHNOLOGY: DIRECTOR 2018-present

• Oversaw outreach, fundraising, and membership bylaw changes to recover a roughly 80 member makerspace from a \$16k tax debt (3 years of unfiled taxes)

2012 - 2015		
2018–present		
• Organized staging and transportation for about a dozen large-scale art installations from Toronto and Montreal to exhibit in Stone Mills		
2012 - 2014		
2012		
2005-2007		

- Restructured financial records to bring into accordance with GAAP
- Spearheaded Ontario Bike Plan project, leading to the CycleON provincial cycling strategy

Interests

In my spare time, I live on a sailboat, race and cruise with my home, build mathematical sculptures and engaging playground toys, bicycle, hunt, maintain an internet server (hosting about a dozen virtual servers), and learn and practice fabrication techniques for sculpture in various media (with a particular focus on metal, electronics, and the use of fire — I am a licensed pyrotechnician).