

**Computer Scientist, Research & Innovation Engineer** with various experiences in design, innovation and conceptualization most of my work is at the overlap of innovation/deep tech' *I believe that we are essentially social creatures and we achieve our greatest aspirations when we work together-not as individuals*

**Diverse Placements:** I performed technical software developments in areas including:

Optimization	Algorithm	Software development life	Conceptualization	Full Stack Development
Data Analysis		cycle	Modeling	Relational Database

**Software Development Skills:** Cloud Platform (AWS), Data Structure and Algorithm, Git, Emacs, Jupiter Notebook, UNIX, Networking basics, Asana, Trello

**Problem Solving Skills:** Interpersonal skills, Design thinking & collective intelligence practices, Logical thinking & Lobbying, Leadership, Active listening & Flexibility

**Computer programming and coding:** Python, Ruby on Rails, JavaScript, C#.Net, ASP.net, MySQL, PostgreSQL, HTML, CSS, JavaScript, jQuery, Django, Telerik, VHDL, Jira, BugTracker, VBA, UML, Matlab, Haskell\*, Emacs, Atom IDE, Visual Studio

**Operating Systems:** Debian GNU/Linux, Windows, macOS <|> **Framework:** Scrum, Lean

## PROFESSIONAL EXPERIENCE

**European Council for Nuclear Research (CERN) - IdeaSquare** 📍 Geneva, Jan 2018 - Present (2 year 4 mths)

**Design & Innovation Engineer in Deep Tech - Researcher & Serial Learner**

- ⦿ **Research & Innovation Development:** Designed a novel solution, called *New Alexandria* for collaborative documentation of breakthrough innovations using Distributed Ledger Technology, ML & Graph Search Algorithms
- ⦿ **Collaboration Establishment:** Established different collaboration with NGOs, Corporations and International organizations, among them a collaboration between Akasha Foundation and CERN IdeaSquare for a €1 million grant
- ⦿ **Design and Facilitation Support:** Designed, Organized and Facilitated Senior International Workshop using collective intelligence and Design thinking tools
- ⦿ **Business intelligence analysis:** Co-designed and engineered a 5 year strategy for CERN IdeaSquare

**University of Geneva/-Citizen CyberLab** 📍 Geneva, Switzerland, 2017 to 2019, 35%, (2 year 2 mths)

**Research Assistant and Program Coordinator**

- ⦿ **Research and Assessment:** Assessed & Researched more than 15 online existing documentation platform and surveyed users experiences to find the best way to document online
- ⦿ **Reporting & Analysis:** Produced a research investigation report and recommendations for future development
- ⦿ **Software Development:** Adapted a collaborative online documentation platform from MIT called **SDGinProgress**. I programmed and maintained the code in **Ruby on Rails, jQuery, JavaScript, PostgreSQL, solr search engine**

**eResearch Technology, Inc.** 📍 Geneva, Switzerland, 2016 to 2017, 50%, (1 year 1 month)

**Junior Software Developer and Project Manager Assistant**

- ⦿ **Testing, Analysis and Concept Engineering:** Tested, Analysed and reviewed the existing Excel VBA solution. I also framed the project, collected and the data, & selected actions based on user needs & preferences
- ⦿ **Software Development and Team Management:** Build an automatized web app system ( MVP ) in collaboration with 2 full stack developers; tested it with users and reported future recommendation for further development. MVP was build using **Functional Design, UML Modeling, Macro VBA, Python, Django, MySQL, HTML, CSS, JS**

**World Economic Forum** 📍 Geneva, Switzerland, Mar 2016 to June 2016, 40%, (4 mths)

**Data Migration Engineer**

- ⦿ **Software Development:** Developed and resolved the backup. I restored the data from old system and did the data migration for the new iOS system. using the following technologies: **Python, MySQL, OS, MS-Office, ATOM IDE**

**VINCI Energies** 📍 Geneva, Switzerland, Mar 2013 to Aug 2013, Thesis Project (6 mths)

**Junior Technical Project Manager**

- ⦿ **Concept Engineering:** Researched and well-conceptualized an Internal Enterprise Content Management web app system that replaced Lotus. I collaborated with a team of full stack web developers to develop the solution. I tested it and created a user friendly tutorials for more than 80 users. I used for the latter, **VB.net, Jira and SmartSheet**

# INTERNSHIP

**Oger International** 📍 Jeddah, Saudi Arabia, Jul 2012 - Sept 2012, Intern, (3 mths)

Industrial Engineering Assistant: Installed & programmed sensor alarm system, testing & validation using **VHDL**, **LabView**

**HaririMed** 📍 Beirut, Lebanon Jun 2011 to Aug 2011, Intern, (3 mths)

Software Developer/Backend: Developed 3 user controls for a medical web app, Data Cleansing (**SQL** **SIS**) for 400k patients

**CISCO** 📍 Tripoli, Lebanon, Mar 2008 to May 2008, Intern, (3 mths)

Trainee: *Hands-on* on CISCO hardware & software. I did CISCO Certification in Networking, **CCNA1**, **CCNA2** and **CCNA3**

# EDUCATION

**University of Geneva, M.Sc. Computer Science** 📍 Geneva, Switzerland, Nov. 2018

- ⊙ Specialties: Algorithms and Parallel Computing, Stochastic Information Processing, Semantics, Modeling & Verification, Theoretical Computer Science, Machine Learning, Data Mining and Information Retrieval
- ⊙ Research & Development: Submitted a thesis on *Comparing Digital Platforms for Challenge-based Learning*

**University of the Littoral Opal Coast, M.Sc. Electrical Engineering** 📍 Lille, France, Aug. 2014

- ⊙ Specialties: Digital electronics, , Optoelectronics, Electromechanics, Electromagnetism

**University of the Littoral Opal Coast, M.Sc. Industrial Information Technology** 📍 Lille, France, Aug. 2013

- ⊙ Specialties: Industrial data processing, Predictive analytics, modelling, Signal & Image Processing

**Lebanese University, B.Sc. Computer & Communicat° Networks Engineering** 📍 Beirut, Lebanon, Aug. 2012

- ⊙ Research: Submitted a thesis on *Simulation by cellular automata for natural risk management*

# ENTREPRENEURIAL EXPERIENCES

**Founder of The Quantum FutureX Initiative** - 📍 Geneva, CH, 2019

- ✕ QFX is an open initiative for forward-thinking people to step forward and collaborate on creating the futures of quantum. It brings hardcore scientists, creatives and industry members to work together on high risk, high reward projects

**Founder of The Mobility Hackathon Community** - 📍 Geneva, CH, 2018

- ✕ A large gathering that brings a diverse range of perspectives, and ignite the flow of ideas between different members of society that focuses on the intersection of digital technology and urbanization with more inclusive perspective for mobility

**Initiated a collaboration** for **New Alexandria**, €1 Million EU project<sup>🔗</sup> - 📍 Geneva, CH, 2018

- ✕ A collaboration between Akasha Foundation<sup>🔗</sup> and CERN to build an online platform based on Akasha DApp to co-create & participate in science project while fully recognizing individual contributions with a system based on Blockchain.

- ✕ **Organizer** of Physics Meets Blockchain Workshop for open source development & blockchain at CERN<sup>🔗</sup> 📍 Geneva, 2018
- ✕ **CTI Entrepreneurship training certificate**, 14 weeks of Business Concept Training from InnoSuisse<sup>🔗</sup> 📍 Geneva, 2016

# PUBLIC SPEAKING ENGAGEMENTS

**The Quantum Future, Innovation and Community**

The International Telecommunication Union<sup>🔗</sup> workshop on Quantum Information Technology 📍 Shanghai, China, 2019

**CERN Quantum Initiative & Vision for Blockchain for Open Innovation**

Aarhus University, Department of Physics and Astronomy<sup>🔗</sup>, private talk for senior researchers 📍 Aarhus, Denmark, 2019

**Future Emerging Technologies**

Table Unstable KYOTO SCIENCE OUTREACH<sup>🔗</sup> workshop on Quantum Computers & Blockchain 📍 Tokyo, Japan, 2018

**Blockchain Introduction, Ethereum and Security Challenges**<sup>PPT & essay [here](#)</sup>

Chaired the meetup with Prof. Bryan Ford<sup>🔗</sup>, leader of EPFL Decentralized/Distributed Systems lab 📍 Geneva, 2017

# COMMUNITY ACTIVITIES

- 2015 - Present: Geneva Debate Club<sup>🔗</sup>
- 2018 - Present : CERN Entrepreneurship Meetups<sup>🔗</sup>
- 2016 - 2018 : Swiss Cyber-Security meetup<sup>🔗</sup>

**References:** Prof. John Ellis<sup>🔗</sup>, Dr. Markus Nordberg<sup>🔗</sup>, Dr. François Grey<sup>🔗</sup>, Dr. Ben Segal<sup>🔗</sup>

# MOOC & RECENT LEARNING

- Learning:** MIT Quantum Information Science I, II<sup>🔗</sup>
- Reading:** InvestED<sup>🔗</sup>, Quantum Computations and Quantum Information<sup>🔗</sup>, How to Design Programs<sup>🔗</sup>