Discovering & Mastering the Blockchain

A Development Course

Delivered by Braun Brelin

In an effort to broaden the use of Blockchain technology across financial services, 25 of the largest investment banks including Credit Suisse, JP Morgan and Goldman Sachs plan to develop common standards for the technology and they need the know-how and thought leaders to achieve this.

As banks and financial institutes look to harness these technologies and upgrade old systems in order to save costs with an automatic execution of contracts, knowledge and expertise about the Blockchain technology becomes ever more valuable.

Through a combination of training, informative talks and workshops, Braun Brelin will guide you through five days to help you grow in confidence as you master Blockchain technologies.

This workshop is aimed at developers or people with technical skill sets working in the financial sector that want to understand the underlying technologies. We will cover some of the technologies that underpin Bitcoin and the Blockchain before we dive into the technical details of the Blockchain itself.

Additionally, the workshop will divide participants into teams towork on a project. The project that the students will work on can be either

1. Assigned by the instructor or
2. Decided on by the team ahead of time.

Students should meet the following requirements.

1.     Some software development background, either at school or work.

2.     Some familiarity with either Python or Javascript

3.     Laptop with network connectivity (Wi-Fi) enabled.

Due to the nature of the course, the number of participants will be limited.

Day one

* Intro to Bitcoin Protocol
* Bitcoin transactions, blocks & mining
* Cryptography Hash Functions
* Hash Pointers and Data Structures
* Digital Signature
* Distributed consensus
* **Workshop**: The Blockchain Starter Toolkit

Day 2

* Bitcoin transactions
* Bitcoin scripts
* Applications of Bitcoin scripts
* Bitcoin blocks
* P2P Blockchain network
* Limitations & improvements
* **Workshop**: Write a Low Transaction P2SH

Day 3

* **Workshop day:**
* Project - P2SH, Multisig
* Build a blockchain explorer

Day 4

* Project - Document signing
* Document signing with tokens, hashes and signatures in blockchain
* Review Build demo of project

**Day 5**

* Side Chains
* Smart contracts
* Blockchain technologies & Dapp Overview (Eris, Ethereum, Augur)

**Braun Brelin**is an experienced trainer and veteran of the IT industry with over 25 years experience in the field. One of his passions is spreading the word about cryptocurrencies and blockchain as the future of money and finance. He has presented training programmes within the financial sector for firms such as Citibank, Morgan Stanley, NYSE and The Chicago Mercantile Association amongst many others to keep them competitive. He has also consulted for government institutions around the world and worked at Sun Microsystems, Network Appliance, and other major Silicon Valley companies.

This course will take place inside Geneva train station in a dedicated conference room. Coffee, tea, mineral water and fruit, collation are included in the price.