

FORMER BLOCKCHAIN DEVELOPER AT SKYQUARK · SOFTWARE ENGINEERING MASTER AT UNIVERSITY OF WATERLOO (TORONTO, ON CANADA)

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"Addicting to technology; Self-motivated learning; Definitely NOT nerd; Love music, love sports and love coding!!"

## Skills

• Ethereum, Truffle, Geth, Puppeth, Parity, Solidity, Remix IDE, IPFS, Web3, Mist, Ethereum Wallet, MetaMask, EOS, Docker, Hyperledger Composer&Fabric, BPFT, PoW, PoA, PoS, DPoS(Consensus algorithms), NodeJs, Java, Python, Android, JavaEE, Servlet, JSP, Struts2, Hibernate4, Spring3, Tomcat, Jenkins, MySQL, MongoDB, LevelDB, JavaScript, jQuery, AJAX, HTML, CSS, Maven, OOP, REST, MVC, Linux, Git, Postman, Jira, Infura

## Education

### **University of Waterloo**

Waterloo, ON

MASTER OF ENGINEERING (SOFTWARE ENGINEERING)

Sept. 2015 - Dec. 2017

### **Tianjin University of Technology**

Tianjin City, Tianjin China

BACHELOR OF SOFTWARE ENGINEERING

Sept. 2011 - Jun. 2015

# **Working Experience** .

Skyquark Toronto, ON

BLOCKCHAIN DEVELOPER

Apr. 2018 - Apr. 2019

- Technologies: Ethereum, geth, parity, Solidity, Truffle, Mist, web3, IPFS, EOS, Docker, koa
- Designed and developed Skyquark Crowdsourcing system back-end using Nodejs, MongoDB, LevelDB, web3js, Parity
- Designed and Developed Skyquark Aristotle Chain using Parity.
- Designed and developing the Aristotle token system within Edusphere eco-system.
- Developed Edusphere Intellectual Property protection dApp(smart contracts) on Aristotle Chain.
- Developed Edusphere certificate verification dApp(smart contracts) on Aristotle Chain.
- Designed and Developed Skyquark ICO smart contract(ERC-20)
- Provided 'Blockchain for Junior' online lectures as instructor at www.edusphere.io
- Developed an EOS based PoC of Aristotle Chain prototype.

BlackBerry Waterloo, ON

#### SECURITY PLATFORM AUTOMATION DEVELOPER INTERN

May. 2017 - Sept. 2017

- Technologies: Android, Jenkins, Shell Script, UiAutomatorViewer, JUnit4, Linux, Git, JIRA, SSH, Security key exchange
- Developed security key based unit test cases including S/MIME, PGP and large size Sign and Encrypt key.
- Developed test sanity to automatically build testing job for different BlackBerry app components.
- Set up and configure Jenkins server and nodes to organize BlackBerry security message jobs.
- Designed and developed Monkey command tool App for automation and pressure test on BlackBerry apps.

**TCSL**Tianjin City, Tianjin China

FULL STACK DEVELOPER

Feb. 2015 - Aug. 2015

- Technologies: JavaEE, JavaScript, jQuery, Struts2, Spring3, Hibernate4, Linux, Maven, Nexus, Tomcat, PostgreSQL, SVN
- Participated in design and development the architecture and backend framework.
- Built a local maven component server for the entire developing group.
- Developed business components of data persistence using Hibernate.
- Developed business transactions control unit using Spring.
- Participated in the development of user interfaces.

Oracle Tianjin City, Tianjin China

BACK-END DEVELOPER INTERN

Sept. 2014 - Feb. 2015

- Technologies: JavaEE, AJAX, jQuery, DBCP, MySQL, Tomcat, Apache Component lib, MVC, Linux, SSH, Git
- Developed a social network system based on JavaEE(SSH framework) and MySQL.
- Designed the database and implemented with PowerDesigner.
- Designed the architecture and using MVC for implementation.
- Awarded Best Intern Project by Oracle.

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# Projects(Github)

## **Skyquark Aristotle Chain**

TECHNOLOGIES: TRUFFLE, PARITY, AWS

May 2018 - Apr 2019

- Aristotle Chain using parity with PoA consensus algorithm generates an EVM based public chain for the foundation of Skyquark Eco-system.
- Users need to sign up Edusphere system to get a wallet address connecting to Aristotle Chain.
- ETH Pre-fund accounts are transaction validators who are responsible for mining new blocks, validating all transactions.
- Users could be part of validators and sync full Aristotle Chain blocks to earn more tokens.

#### **Skyquark Crowdsourcing System**

TECHNOLOGIES: NODEJS, KOA, MONGODB, LEVELDB, WEB3.JS, TRUFFLE, AWS, POSTMAN

Sept. 2018 - Apr. 2019

- Crowdsourcing system is the extension of Nodejs back-end web server between Edusphere system and Aristotle Chain.
- It's also the Aristotle chain user address, chain nodes and smart contracts management center.
- It connects with MongoDB as main business logic database and LevelDB as users reputation and other behaviors databases.
- It communicates with Aristotle Chain through Web3.js API.
- It provides APIs to the front-end edusphere system.
- It provides users a revenue auto-distribution system based on the Aristotle Token mechanism without signing any paper or electrical revenue sharing contracts
- Users behaviors on edusphere.io will be used to calculate the reputation and token rewards and the smart contracts deployed on Aristotle Chain will be triggered to make reward transactions

#### **Skyquark ICO Smart Contract for Aristotle Token**

TECHNOLOGIES: SOLIDITY, TRUFFLE, REMIX IDE, ETHEREUM WALLET, OPENZEPPELIN, QUANTSTAMP

Aug. 2018 - Oct. 2018

- This ICO smart contract has four components: Secure math, ownership control, pause, ERC-20 implementation.
- It has been tested by OpenZeppelin and Quantstamp.
- It was deployed on Ethereum mainnet but tested on Rinkeby.
- Aristotle Token is able to be transferred between Ethereum mainnet and Aristotle chain using parity bridge protocol(developing).

## **Skyquark Intellectual Property Protection dApp**

TECHNOLOGIES: TRUFFLE, SOLIDITY, WEB3, NODEJS, IPFS, WEBPACK

June. 2018 - Sept. 2018

- IP Protection dApp developed on Rinkeby testnet first and deployed to Aristotle Chain after.
- It has four different layers: chain layer, smart contract layer, web3(NodeJs) layer and UI layer
- For the web part, it needs a web server like AWS to host the all front-end resource files(or IPFS) and web3 will connect to blockchain provider to interact with smart contracts and send transactions to the chain.
- For all large size documents that users submit, they are all stored on the IPFS, only hash value will be stored into blockchain.

#### Monkey

TECHNOLOGIES: ANDROID, ADB SHELL MONKEY, ANDROID SYSTEM PERMISSION, ANDROID SYSTEM SIGN, GIT

June. 2017 - Sept. 2017

- This is an Android application for BlackBerry Spark Day.
- This app encapsulates adb shell monkey command for BlackBerry internal pressure and performance testing.
- Granting Android system permission and system sign to run sudo commands.
- Running monkey command on target apps and generating the testing report for analyzing.

### **Waterloo Discovery**

TECHNOLOGIES: ANDROID, GOOGLE MAP API, GEOLOCATION, AWS, MYSQL, WEB SERVER, GIT

Feb. 2017 - Feb. 2017

- Developed an Android application about exploring the city of Waterloo for new comers such as international students and travelers in 2 people's team.
- Using Google Map API to locate users, then calculate the distance.
- Using Google Nearby resources.
- Awarded Top 5 Hackathon project.

# **Accomplishments** \_

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#### Waterloo Hackathon No.1 Team 2016

Oct. 2016 - Oct. 2016

- Technologies: HTML5, CSS3, AngularJS.
- Developed a widget based on UW Portal SDK in a 5 people team.
- This widget allows students to create and answer questions for different subjects.
- Questions and answers could be ranked by different features.
- Awarded No.1 Hackathon project.

## **Java Coding Standards Research**

Mar. 2016 - Jul. 2016

- Research about Java Coding Standard Exception chapter.
- Software Reliability Engineering Research.
- Applying testing tools to prove reliability. ex. PMD, SonarQube, FindBugs, JML, Checker Framework, Z3, SMT, SAT.
- Awarded Top Research project by UW Research Group in Summer 2016.

# Honors & Awards \_\_\_\_\_

2015	Outstanding Graduated Student, Tianjin University of Technology	Tianjin China
2015	National Scholarship of China, Tianjin City Government	Tianjin China
2014	First Class Student Scholarship, Tianjin University of Technology	Tianjin China