

# 변동삼 [Dongsam Byun]

Blockchain Engineer with Machine Learning and Python Backend

interested in text and finance data

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## Experience

2017-

**Self-employed**, Freelancer Blockchain Engineer, Lecturer, Consultant, Researcher

- Built Ethereum Private Blockchain Network and Ledger
- Implemented Blockchain Backend Server using Geth and web3.py
- Developing Smart Contract, Dapp for publish ERC20 Token and ICO
- Lecture on Ethereum and Solidity Programming Course, Fast campus 📺

Ethereum

Bitcoin

Geth

web3.py

web3.js

Solidity

Python

Flask

AWS

2016-17

**WantedLab**, Machine Learning, Software Engineer (Matching Cell)

**원티드 (wanted.co.kr)** Data Analysis, Machine Learning, Backend, REST API Development

- Implemented morphological analysis and extract keyword of Resume, Job Description text ( NLP, TF-IDF, Word2vec )
- Developed matching model and scoring system for between user and job ( Collaborative Filtering )
- Optimized feature for matching model using DNN, Tensorflow
- Developed auto Crawling system for company news with noise filtering

Python

Flask

AWS(EC2, ELB, RDS, CF, S3, Lambda)

Redis

Jupyter

gensim

KoNLPy

Numpy

TensorFlow

scikit-learn

Celery

SQLAlchemy

Mysql

Elasticsearch

2016

**Cheoum**, Lead Developer

**CUfund** Backend, Full Stack of P2P, P2B Crowd Funding Platform

- Developed whole web service of P2P Loan Platform
- Implemented Credit rating inquiry, identity verification, virtual account integration system
- Built infrastructure and DevOps using AWS

Python

Django

AWS (EB, RDS, Lambda,

SQS, CF, S3)

Git

Slack

Trello

PostgreSQL

2015-16

**DAYLI Financial Group(Nomad Connection)**, Researcher(DataLabs)

- Developed Log Collecting and analysis system for web page
- Did research and analyze news text for stock investment ( Word2Vec, Doc2Vec )

Python

Flask

AWS(EB, Lambda, SQS, S3)

Javascript

Spark

Zeppelin

Gensim

Vagrant

Git

KoNLPy

MongoDB

RESTful

2014-15

**Self-employed**, Freelancer

**Web, Data Crawler Development**

Facebook Page posts,

comments

Amazon

products, reviews

Instagram Posts, tags

Google Image

Naver News

Naver Finance 📺

Daum Cafe Posts

Election candidate data

ETC Apps, Shops ...

**Automation**

- Browser Automation for SEO [ Python, Selenium ]
- Business Automation for law firm [ Python, Flask ]

- Instagram Image Upload Automation [ Python ]
- Facebook Page Posting Automation [ Python, GraphAPI ]

## Education

- 2015-18 **Korea University**, M.S. in Computer Science and Engineering  
'Expected in 2019
- |   |  |  |
|---|--|--|
| Text mining for bigdata<br>Bigdata planning and<br>analysis | Advanced information<br>retrieval<br>Social network security | Research in system<br>security<br>Venture capital<br>investments |
|---|--|--|
- 2011-15 **Dongguk University**, B.S. in Computer Science and Engineering  
Pizza Sales Prediction by Using Big Data Analysis / KIPS 2014 Fall Conference VOL 21 NO. 02 PP. 0890 ~ 0893 (2014. 11)  
AI Lab (RA, TA)

## Contributions

- |                       |                       |                 |
|-----------------------|-----------------------|-----------------|
| ethereum/pyethereum   | ethereum/web3.py      | bitcoin/bitcoin |
| raiden-network/raiden | tensorflow/tensorflow |                 |
| dongsam/logdig        | dongsam/ko2vec        |                 |

## Projects








- 2017 **Coin-Trends: CryptoCurrency Analysis Using Text Mining and Machine Learning**  
Quantitative Aanlysis, Text Mining, Open Source Analysis, Machine Learning Approach  
Sentimet Aanlysis about Chatting data using doc2vec
- 2015 **Logdig: Web/App Big Log Analysis Framework**  
A framework that allows users to generate, collect, analyze, and visualize click, move, and exit logs generated by Web / App services  
Flask RESTful Server, Spark, Zepplien Dashboard
- 2014 **Sales forecast system through big data analysis**  
Forecasts future sales volume by analyzing 10-year sales data on POS, online, and phone order share in the food service industry and external variables such as weather, news, weblog, and marketing information  
Data ETL using Python, Pandas and Machine Learning with Weka, Jython
- 2013 **System Trading by New Opinion Mining**  
Signal generation through real-time news crawling and positive, negative opinion mining  
Proeject Manager, Python, XingAPI(Etrade)
- 2012 **Secure payment system based on QRcode scan**  
Make payment by QRcode scan with sales information, By encrypting the user authentication and credit information required for payment and storing it on a personal smartphone rather than on a server  
Proeject Manager, Payment, Verification Server QRcode Manage Server, POS, Web/App Client
- 2012-14 **ETC**  
Ubiquitous smart home control system through voice recognition and web-based application  
Lecture assistant software with hand motion motion sensor LeapMotion  
Alarm and action execution system by proximity approach detection  
Manufacture of embedded security equipment using Raspberry-Pie

## Activities


- 2018 Technical Mentoring, Judging for Blockathon ( Blockchain Hackathon ), Fastcampus
- 2015 Korea University CCS Lab(Computer & Communication Security Laboratory) Full-Time
- 2014-16 public-private joint investigation team for cyber security, [ Korea Ministry of Science and ICT ]
- 2014 Dongguk University AI Lab TA, RA
- 2013-14 **Software Maestro** 4th Step 2, Top 50 [ Korea Ministry of Science and ICT, NIPA ]

- 2012-13 **BEST OF THE BEST** 1st Step3, Top 20 finalists, Cyber Security Elite Training program [ Korea Ministry of Science and ICT, Kitri ]
- 2011-12 Microsoft Student Partner 5th [ Microsoft Korea ]

## Presentations

- 2017 Consensus Algorithm of Ethereum and Mining Flow, Korea Ethereum Research Group, Google Campus Seoul 
- 2017 Ethereum A to Z, Blockchain Business Research Group 
- 2017 Machine Learning Engineer Meetup, WANTED x wework 
- 2015 Whitebox Testing, 2015 monsterz seminar, Hanyang Univ. 
- 2014 Sales Prediction System by Using Big Data Analysis, Hanium expo 2014, COEX 
- 2014 Drone-based tour and control systems with Cisco CMX technology, CISCO IoE Codefest, Song-do 
- 2013 Secure payment system based on QR code scan, COEX 

## Trainings

- 2014 Training and exploration at Silicon Valley, Google, MS, Stanford, HP etc.
- 2013-14 Software Maestro summer, winter education and training
- 2012 Cyber Security Elite Training program BoB education and training 

## Prizes

- 2014 Computer Engineering General Design Project, Grand Prize [Dongguk Univ.]
- 2013 Software engineering project, Grand Prize [Dongguk Univ.]
- 2013 2nd TOPCIT competition, Special prize [Korea Ministry of Science and ICT, NIPA]
- 2013 APT attack simulation competition for enterprise security experts, 3rd place [Symantec]
- 2011 Technical report writing and presentation contest, Grand Prize[1st] [Dongguk Univ.]
- 2010 Open source software introduction essay contest, 2nd place [redhat Korea]




## Patents




- 2014 AUTOMATIC SALES FORECASTING SYSTEM BASED ON DATA CRAWLING AND MANAGER'S INPUT ([Publication, 1020140157122](#))
- 2013 SYSTEM AND A METHOD FOR TRADING STOCKS AUTOMATICALLY BASED ON OPINION MINING ([Publication, 1020130142019](#))
- 2013 THE SECURITY ONLINE PAYMENT SYSTEM AND THOSE METHODS BASED ON TWO DIMENSIONS CODE SCANNING WITH A DEVICE CONTAINING ENCRYPTED PAYMENT AUTHENTICATION INFORMATION ([Publication, 1020130001343](#))
- 2012 SECURITY PAYMENT SYSTEM BASED ON A CODE SCAN THROUGH A TERMINAL STORING ENCODED AUTHENTICATION INFORMATION AND A METHOD THEREOF FOR SAFELY PERFORMING AUTHENTICATION AND PAYMENT ([Publication, 1020120062929](#))

## Certifications

- 2014 Engineer Information Processing (Human Resources Development Service Of Korea)
- 2010 LPIC (LPI)
- 2010 CCNA (CISCO)
- 2009 Certificate of Hacking Security Expert (National Association of Hacking & Security)

## Links

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 Facebook  
 Github

 @dongsamb  
 LinkedIn  
 Youtube

 CV  
 Steem