

# Dongsam Byun [변동삼]



Blockchain Engineer / Blockchain Technical Advisor

Cosmos / Tendermint / Ethereum / Solidity / Smart Contract / DApp / Python Backend / Machine Learning

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## Experience

2018–

### B-Harvest, CTO

- Building, managing and optimizing for Cosmos validator(DPoS) node system, Reliability Engineering
- Cosmos, Terra, IRIS, Kava, Comdex, Solana, Polkadot, IDEX, etc Validator ( moniker: B-Harvest )
- Contributing Cosmos-SDK, Tendermint open source and Customizing for analysis, validation
- Development and Consulting, Auditing of Blockchains Based on Cosmos-SDK and Tendermint
- Cosmos Berlin Hackatom 2019, Honorable Mention, dDex: decentralized Delegation Exchange
- Cosmos Seoul Hackatom 2019, Speaker, Database, Statistics, and Data Mining in dPoS Blockchain
- Ranked Top Tier in Cosmos Game of Stakes (moniker: bharvest)
- Designing Tokenized Fund using Smart Contracts

Cosmos  
Tendermint  
ELK  
Prometheus

Ethereum  
Solidity  
Ansible  
AWS(EC2, VPC, DX)

YubiHSM2  
Golang  
Rust  
Python

2018

### The Language Network, Lead Blockchain Engineer

- Developed Smart Contract, Dapp for publish ERC20 Token and ICO
- Implemented Blockchain Backend Server using Geth and web3.py
- Built Ethereum Blockchain Network as a sidechain and Ledger

Ethereum  
Geth  
Web3.py  
Web3.js

Solidity  
IPFS  
Truffle  
Python

Flask  
AWS  
Oraclize

2017–

### Self-employed, Freelancer Blockchain Engineer, Advisor, Lecturer, Author

- Advise for ICO and Blockchain Projects
- Blockchain Advisory Board Member, IIB Council 🐼
- Advisory Board Member for Blockchain Tech [sidechain, smart contract], Storichain 🐼
- Lecture on Ethereum and Solidity Programming Course, Fast campus 🐼
- Auditing Smart Contracts (Solidity)

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	AWS (EB, RDS, Lambda,	Slack
Django	SQS, CF, S3)	Trello
	Git	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	Spark	KoNLPy
Flask	Zeppelin	MongoDB
AWS(EB, Lambda, SQS,	Gensim	RESTful
S3)	Vagrant	
Javascript	Git	

2014-15 **Self-employed, Freelancer**  
**Web, Data Crawler Development**

Facebook Page posts, comments	Google Image Naver News	Election candidate data ETC Apps, Shops ...
Amazon products, reviews	Naver Finance	
Instagram Posts, tags	Daum Cafe Posts	

#### 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 2020

Text mining for bigdata	Advanced information	Research in system
Bigdata planning and	retrieval	security
analysis	Social network security	Venture capital 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	tensorflow/tensorflow	OpenMined
ethereum/solidity	dongsam/ko2vec	BurrowCoin
raiden-network/raiden	bitcoin/bitcoin	omisego/plasma-mvp
dongsam/logdig	LanguageNetwork	cosmos/cosmos-sdk
ethereum/web3.py	solidity-korea	

## Projects















2018 **DAIPO: Decentralized Autonomous Initial Public(Person) Offering**

2018 **BurrowCoin: Ethereum Deposit System with Token Economy**

2017 **Coin-Trends: CryptoCurrency Analysis Using Text Mining and Machine Learning**  
Quantitative Analysis, Text Mining, Open Source Analysis, Machine Learning Approach  
Sentiment Analysis 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	<b>Sales forecast system through big data analysis</b>   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	<b>System Trading by New Opinion Mining</b>   Signal generation through real-time news crawling and positive, negative opinion mining Proeject Manager, Python, XingAPI(Etrade)
2012	<b>Secure payment system based on QRcode scan</b>   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	<b>ETC</b> 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	<b>Software Maestro</b> 4th Step 2, Top 50 [ Korea Ministry of Science and ICT, NIPA ]
2012-13	<b>BEST OF THE BEST</b> 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

2018	Trends and View about Blockchain Develpment, Web World Contents Service Conference 2018 
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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f Facebook  
G Github

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in LinkedIn  
📺 Youtube

📄 CV  
🌀 Steem