Dongsam Byun [변동삼]

Blockchain Engineer

Cosmos-SDK / Tendermint / Ethereum / Go

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Profile

Started career with backend development and security, working for FinTech companies with an interest in combinations of IT and finance, developing p2p loan service, researching data, and seeing the blockchain with the possibility of smart contracts. Since then, conducted various development projects and research related to Ethereum, and I have been attracted to the structure of Tendermint / Cosmos-SDK / IBC, so I have been doing research and development since 2018 at B-Harvest

Experience

2018- **B-Harvest**, CTO

2018

- -Developing tendermint Liquidity Module of the Cosmos-SDK, which serves AMM(Automated Market Makers) on Cosmos Hub
- -Contributing Cosmos-SDK, Tendermint open source and Customizing for analysis, validation
- -Development and Consulting, Auditing of Blockchains Based on Cosmos-SDK and Tendermint (Kava, Terra, etc.)
- -Building, managing and optimizing for Cosmos validator(DPoS) node system, Reliability Engineering
- -Cosmos, Terra, IRIS, Kava, Chainlink, Secret Network, Band Protocoal, etc Validator (moniker: B-Harvest)
- -Ranked Top Tier in Cosmos Game of Stakes (moniker: bharvest)
- -Reporting critical security vulnerability (Gaia, Cosmos-SDK, Cosmos-Hub)
- -Designing Tokenized Fund using Smart Contracts

Cosmos-SDK Ethereum AWS(EC2, VPC, DX)

Tendermint Solidity Golang

The Language Network (Atlas Labs), 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 Web3.py IPFS
Geth Solidity 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)

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

FlaskgensimCeleryAWSTensorFlowSQLAlchemyRedisscikit-learnElasticsearch

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

Django AWS PostgreSQL

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)

Flask Spark Gensim AWS Zeppelin MongoDB

2014–15 **Self-employed**, Freelancer

Web, Data Crawler Development

Facebook Page posts, Instagram Posts, tags Naver Finance Comments Google Image Election candidate data
Amazone products,reviews Naver News 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

Text mining for bigdata Advanced information Research in system security
Bigdata planning and retrieval Venture capital investments

analysis Social network security

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)

Al Lab (RA, TA)

Contributions ()

cosmos/cosmos-sdk \(\text{O} \)ethereum/solidity \(\text{O} \)LanguageNetwork \(\text{O} \)tendermint/tendermint \(\text{O} \)ethereum/web3.py \(\text{O} \)solidity-korea \(\text{O} \)tendermint/liquidity \(\text{O} \)tensorflow/tensorflow \(\text{O} \)OpenMined \(\text{O} \)ethereum/pyethereum \(\text{O} \)bitcoin/bitcoin \(\text{O} \)omisego/plasma-mvp \(\text{O} \)

Projects

| 2020 | Liquidity: Tendermint AMM Liquidity Module of Cosmos-SDK % 🗘 |
|------|---|
| 2019 | Four-Pillars-Project: better validator operation of Tendermint/Cosmos-SDK O |

Coin-Trends: CryptoCurrency Analysis Using Text Mining and Machine Learning O
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

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)

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

Activities

| 2021 | Reporting critical security vulnerability (Gaia, Cosmos-SDK, Cosmos-Hub) % |
|---------|---|
| 2020 | Cosmos Community Contributor Grants % |
| 2019 | Cosmos Berlin Hackatom 2019, Honorable Mention, dDex: decentralized Delegation Exchange |
| | % |
| 2018 | Technical Mentoring, Judging for Blockathon (Blockchain Hackathon), Fastcampus ${}^{oldsymbol{\diamond}}$ |
| 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 Al 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

| 2019 | Database, Statistics, and Data Mining in dPoS Blockchain, Cosmos Seoul Hackatom 2019 🗞 |
|------|---|
| 2018 | Trends and View about Blockchain Develpment, Web World Contents Service Conference 2018 |
| | 90 |
| 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 |
| | You Gilbe |
| 2013 | Secure payment system based on QR code scan, COEX 🛗 |
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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] |

Publications, Patents

| 2014 | Pizza Sales Prediction by Using Big Data Analysis / KIPS 2014 Fall Conference VOL 21 NO. 02 PP. |
|------|---|
| | 0890 ~ 0893 (2014. 11) |
| 2014 | AUTOMATIC SALES FORECASTING SYSTEM BASED ON DATA CRAWLING AND MANAGER'S INPUT |
| 201. | (Publication, 1020140157122) |
| 2013 | SYSTEM AND A METHOD FOR TRADING STOCKS AUTOMATICALLY BASED ON OPINION MINING |
| 2013 | |
| | (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) |
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| 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) |
| 2003 | Certificate of Flacking Security Expert (National Association of Flacking & Security) |
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| | ■ dongsamb@gmail.com |
| | ☐ Github in Linkedin |
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Certifications

Links