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 (Gravity-DEX)
- -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 Protocol, 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 publishing 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

- -Advice 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

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)

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)

AI 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 %	t AMM Liquidity Module of Cosmos-SDK % 🗘
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Four-Pillars-Project: better validator operation of Tendermint/Cosmos-SDK C

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

Quantitative Analysis, Text Mining, Open-Source Analysis, Machine Learning Approach %

Sentiment Analysis about Chatting data using doc2vec Q

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 foodservice 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 Project 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

Project Manager, Payment, Verification Server QRcode Manage Server, POS, Web/App Client

Activities

Reporting critical security vulnerability (Gaia, Cosmos-SDK, Cosmos-Hub) 🗞
Cosmos Community Contributor Grants %
Cosmos Berlin Hackatom 2019, Honorable Mention, dDex: decentralized Delegation Exchange
96
Technical Mentoring, Judging for Blockathon (Blockchain Hackathon), Fastcampus 🗞
Korea University CCS Lab(Computer & Communication Security Laboratory) Full-Time
public-private joint investigation team for cybersecurity, [Korea Ministry of Science and ICT]
Dongguk University Al Lab TA, RA
Software Maestro 4th Step 2, Top 50 [Korea Ministry of Science and ICT, NIPA]
BEST OF THE BEST 1st Step3, Top 20 finalists, Cyber Security Elite Training program [Korea
Ministry of Science and ICT, Kitri]
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 Development, 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
	You diese the second of the se
2013	Secure payment system based on OR code scan. COEX 🛎

Training

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)
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)
	■ dongsamb@gmail.com
	☐ Github in Linkedin

Certifications

Links