Ryoung Woo

Software Engineer · Data Scientist

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"I want to grow into a better mathematician and team player."

Summary

As a developer, I have grown up as a mathematician and team player for six years. As a mathematician, I enjoy thinking procedurally like a puzzle. At first, I should focus on small pieces. The sooner I predict the completed view, the faster I can solve the puzzle easily. As a team player, I enjoy cooperating passionately like a college basketball player. Whether break time in game or train time before game, we discussed a lot. What is needed, How to apply it, Which is better, finally Whether my team wins or not. I want to grow into a better mathematician and team player.

Experience

BISTel, Co.   *Seoul, S.Korea*

Software Engineer, Data Scientist   *Nov. 2013 - Present*

- Research on new technology of IT and academic paper. Share this with team.
- Gather requirement from external client and internal stakeholder.
- Develop or upgrade a product according to the above technology, paper, requirement.
- Deploy the product to client and Make them solve their problem.

Korea Information Engineering Services, Co.   *Seongnam, S.Korea*

Internship   *Sep. 2013 - Oct. 2013*

- Check quality assurance for product features to be released.
- Refine documentation for a user's point of view.

Education

Ministry of education, science and technology, Daejin University   *Seoul, S.Korea*

Completion of course, Hadoop expert for bigdata storage and management based on cloud computing   *May. 2013 - Aug. 2013*

- Because I completed this course well, I was able to participate in the internship.

College of Education, Kangwon National University   *Chuncheon, S.Korea*

Bachelor of Science, Mathematics Education   *Mar. 2004 - Feb. 2012*

- Scholarship on 1st year 2nd semester, 3rd year 2nd semester.
- Semi runner up of college basketball competition on 2nd year.

Project

Develop eDataLyzer   *Seoul, S.Korea*

Software Engineer, Data Scientist   *Nov. 2013 - Present, more than 30 M/M*

- The eDataLyzer is a existing semiconductor analytics product for wafer yield map classification and root cause correlation.
- The goal of this project is to redevelop the eDataLyzer for big data.
- So we have led this project in three ways.
- 1st, reconstruct the architecture to micro services from monolithic one.
- 2nd, reorganize to a role based teams from a unified team.(Client, Server, Algorithm, Research, Technical Sales/Support.)
- 3rd, redevelop by Java and C# not only C#
- I belong to Algorithm team, mainly focusing on parallelizing algorithm by new big data technologies.
- In briefly, I have done three ways of parallelizing algorithms.
- 1st, I had redeveloped the algorithms by Java, PostgreSQL, Spring for small data clients.
- 2nd, I had redeveloped the algorithms by non Hadoop based technologies.(GreenPlumDataBase PL/Java, Oracle-R)
- 3rd, I had redeveloped the algorithms by Hadoop based technologies.(Hadoop, BDA, Hawq, HBase, Spark, Eco system)
- We have a lot of semiconductor clients.(Korea: Samsung Electronics, SKHynix, SKSiltron, Japan: Toshiba, Sharp, Taiwan: TSMC, China: BOE)

6th CodeEngn (Reverse Engineering Conference)   *Seoul, S.Korea*

Presenter for <DEFCON 20th : The way to go to Las Vegas>   *Jul. 2012*

- Introduced CTF(Capture the Flag) hacking competition and advanced techniques and strategy for CTF

Honors & Awards

2018	**Finalist**, DEFCON 26th CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2017	**Finalist**, DEFCON 25th CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2014	**Finalist**, DEFCON 22nd CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2013	**Finalist**, DEFCON 21st CTF Hacking Competition World Final	*Las Vegas, U.S.A*
2011	**Finalist**, DEFCON 19th CTF Hacking Competition World Final	*Las Vegas, U.S.A*

DOMESTIC

2015	**3rd Place**, WITHCON Hacking Competition Final	*Seoul, S.Korea*
2017	**Silver Prize**, KISA HDCON Hacking Competition Final	*Seoul, S.Korea*
2013	**Silver Prize**, KISA HDCON Hacking Competition Final	*Seoul, S.Korea*

Writing

A Guide for Developers in Start-up   *Facebook Page*
FOUNDER & WRITER   *Jan. 2015 - PRESENT*
- Drafted daily news for developers in Korea about IT technologies, issues about start-up.

Program Committees

| 2016 | **Problem Writer**, 2016 CODEGATE Hacking Competition World Final | *S.Korea* |
| 2013 | **Organizer & Co-director**, 1st POSTECH Hackathon | *S.Korea* |

Extracurricular Activity

PoApper (Developers' Network of POSTECH)   *Pohang, S.Korea*
CORE MEMBER & PRESIDENT AT 2013   *Jun. 2010 - Jun. 2017*
- Reformed the society focusing on software engineering and building network on and off campus.
- Proposed various marketing and network activities to raise awareness.

PLUS (Laboratory for UNIX Security in POSTECH)   *Pohang, S.Korea*
MEMBER   *Sep. 2010 - Oct. 2011*
- Gained expertise in hacking & security areas, especially about internal of operating system based on UNIX and several exploit techniques.
- Participated on several hacking competition and won a good award.
- Conducted periodic security checks on overall IT system as a member of POSTECH CERT.
- Conducted penetration testing commissioned by national agency and corporation.