

Byeongchan Gwak

kbckbc@gmail.com | (314) 203-5387 | <https://github.com/kbckbc/portfolio>

EDUCATION

Washington University in Saint Louis (WashU)

Saint Louis, MO

Master of Science in Computer Science (GPA 3.93)

August 2021 – May 2023

Pohang University Of Science And Technology (POSTECH)

Pohang, Korea

Bachelor of Science in Computer Science and Engineering (GPA 3.15)

March 2000 – February 2008

PROFESSIONAL EXPERIENCE

Korea Securities Depository (KSD)

Seoul, Korea

Software Engineer

December 2007 – August 2021

- Developed and maintained KSD's eSafe system which generates annual fee revenue of USD 200 Mil with Java, C#, Oracle, Script.
- Developed and maintained KSD's eVote system which supports shareholder's annual voting with HTML, Javascript, CSS, Oracle.
- Designed relational database schemas and related metrics to manage shareholder and company data (Shareholder data is typically hundreds of millions or more)
- Participated in establishing e-Securities system (budget: USD 50 Mil. member: 40 KSD employees and 166 external personnel)

Namo Interactive

Seoul, Korea

Software Developer

November 2004 – January 2006

- Developed and converted mobile phone games including 'Blade' and 'Gateway cow' etc.

SOFTWARE PROJECTS

E-safe system (<https://e-safe.ksd.or.kr/index.html>)

August 2016 – September 2019

- Developed the eSafe system, the core system for Korean stock exchange, in a Windows environment using C#, Java, and Oracle for three and a half years.
- Perform BPR of a system that has been used for more than 30 years for the transition to Electronic securities
- Created transition data by digitalizing overall securities according to the related regulations

E-vote system (<https://evote.ksd.or.kr>)

September 2014 - August 2015

- Established technical stack of web-application which supports online general meeting of companies
- Designed Restful API with Java-based server, Oracle-based database schemas and queries, and Mobile Apps for both platforms
- Applied vanilla script and bootstrap for a responsive design for various screens such as mobile, desktop, and tablet.

SKILLS

- Programming Languages: Java, Python, PHP, JavaScript, C, C++, C#, JSP, HTML, CSS, SQL
- Technology: Data Modeling, Enterprise Application Design, Object-Oriented Programming, Event-Driven Architecture, Service-Oriented Architecture, AJAX, NodeJS, Flask
- Database: Oracle, MS SQL, MySQL, MongoDB
- Environments: Windows, Linux (RedHat, Ubuntu), Unix (Solaris), Cygwin, .NET Framework, WebLogic