

SUMMARY

An all-around player with extensive experience in various fields. Expert in web server back-end development, particularly in the billing domain, but also proficient as a web front-end developer using React with JSX or TypeScript. Recently completed a full-time master's degree in natural language processing, fully funded with preferential treatment from Samsung Electronics. Previously developed bootloader and device driver as a system engineer in the BSP team.

PROGRAMMING SKILLS

- **Languages:** Java, SQL, Shell script, Terraform HCL, Javascript (+ JSX, Typescript), HTML/CSS, Python, C/C++
- **Tools:** Spring (MVC, WebFlux, JPA, Security), AWS (+ ECS, EKS), SoapUI, MySQL, React, PyTorch, HuggingFace, GGML
- **Others:** RESTful API, HTTP, TLS, OAuth 2.0, OOP/OOAD/DDD, Clean coding, TDD, Agile development (XP & Scrum), PCI-DSS (+ 3DS2), Device driver, Jira/Confluence, Git/SVN

EXPERIENCE

- **Task Oriented Dialog Research — Samsung Electronics Co., Ltd.** Suwon, Korea
Staff Engineer Mar 2024 – Present
 - On-device Virtual Assistant
- **Sentence Representation Learning Research — Hanyang University** Seoul, Korea
Researcher June 2022 – Feb 2024
 - Analyze and develop efficient methodologies for learning high-quality sentence representations based on large-scale language models
 - Published *Hyper-CL: Conditioning Sentence Representations with Hypernetworks*
 - Published *Comparison and Analysis of Unsupervised Contrastive Learning Approaches for Korean Sentence Representations*
- **Billing development — Samsung Electronics Co., Ltd.** Suwon, Korea
Engineer Nov 2016 – March 2022
 - Led CP portal redevelopment: Used React, Spring MVC, Spring Boot, JPA (2020 – 2022)
 - Developed DSA agreement (2021)
 - Developed subscription product change for active subscription (2021)
 - Implemented 3DS2 respond to EU PSD2 law regulations (2020)
 - Developed remote login to Samsung Smart TV using smartphone (2020)
 - Developed integration test framework: Used SoapUI, Groovy (2019)
 - Migrate buyer portal from monolithic to MSA: Used AWS ECS, Terraform HCL (2019)
 - Rearchitect Billing service for PCI-DSS (2018)
 - Led buyer portal redevelopment: Used React, Spring Boot, JPA (2018)
- **BSP development — Samsung Electronics Co., Ltd.** Suwon, Korea
Engineer Feb 2015 – Nov 2016
 - Port ramdump feature to Samsung Smart TV Kernel (2016)
 - Contributed to kexec-tools utility (<https://bit.ly/3yG44df>)
- **Samsung Software Membership** Suwon, Korea
Undergraduate Feb 2013 – Feb 2015
 - Modify Android Kernel to operate smartphone as webcam, speaker, microphone
 - Accepted as the best project of the year (<http://bit.ly/358b7O8>)

EDUCATION

- **Hanyang University** Seoul, Korea
Master of Science in Computer Science; GPA: 4.06/4.5 *Mar 2022 – Feb 2024*
- **Hongik University** Seoul, Korea
Bachelor of Science in Computer Engineering; GPA: 3.5/4.5 *Mar 2008 – Feb 2015*

PUBLICATIONS

- **Young Hyun Yoo**, Jii Cha, Changhyeon Kim and Taeuk Kim, Hyper-CL: Conditioning Sentence Representations with Hypernetworks, *The 62nd Annual Meeting of the Association for Computational Linguistics (ACL 2024)*.
- **Young Hyun Yoo**, Kyumin Lee, Minjin Jeon, Jii Cha, Kangsan Kim, and Taeuk Kim, Comparison and Analysis of Unsupervised Contrastive Learning Approaches for Korean Sentence Representations, *The 34th Annual Conference on Human and Cognitive Language Technology (HCLT 2022)*.

ADDITIONAL INFORMATION

- **Languages**
 - English: Proficient, Korean: Native