

Siyeon (Ella) Park

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EDUCATION

Seoul Women's University | Seoul, Korea

Mar 2020 - Feb 2025

Bachelor of Engineering, Information Security

Coursework : Operating Systems, Computer Architecture, System Security, Data Structure, Software Engineering, C++/Linux programming

WORK EXPERIENCE

Solutions Architect | **Megazone Corp** | Seoul, Korea

Dec 2024 - Current

Megazone is Korea's largest cloud MSP, serving over 8,000 global clients as a partner of Akamai, Cloudflare, Google, and AWS

- Engineered **Akamai**-based web networks for enterprise clients including Samsung, Coupang, LG, and Hyundai, enhancing **CDN** performance while implementing a **Zero-Trust architecture** for advanced threat detection
- Ensured seamless user experiences during Coupang's iPhone 17 pre-order event by constructing **CDN** configurations supporting 250,000 concurrent users and 26.32 Gbps peak traffic with an offload rate above 97%.
- Blocked over 200M malicious requests monthly while recovering 10% revenue leakage by designing a custom **Akamai WAF** that prevents **bot and DDoS attacks**, achieving over $\geq 99.9\%$ service uptime.
- Architected **Splunk** dashboards for real-time KPI tracking to reduce the manual reporting burden and automate detection processes in alignment with **MITRE ATT&CK** and **OWASP**.

Software Engineer Intern | **4DREPLAY** | San Francisco, CA

Jul 2023 - Dec 2023

4DREPLAY is a Silicon-Valley-based media technology startup innovating real-time 360°, multi-angle video highlights

- Cut project management costs by 30% by designing and implementing a cloud-based groupware application on AWS.
- Enhanced data delivery performance by 90% through the effective configuration of an **AWS CloudFront CDN**.
- Eliminated 40% of data redundancy and ensured data consistency among global offices by consolidating distributed data into a centralized **AWS RDS database**.
- Constructed an automated data pipeline utilizing the **Jira REST API** and **AWS Lambda** to synchronize Jira data with the central database.

Software Engineer Intern | **Tart** | Seoul, Korea

Sep 2021 - Feb 2022

Tart is a fintech startup enabling the discovery and comparison of alternative investments

- Created a real-time user investment dashboard leveraging **React**, **TypeScript**, and **Next.js** achieving a 20% reduction in initial load time and while improving user interaction speed.
- Accelerated deployment times by 40% by implementing automated workflows utilizing **Docker** and **Ansible**.
- Enabled the efficient processing of 200+ requests for downstream applications by developing high-performance Python APIs.

PROJECTS

Improved Malware Packet Classification in Encrypted TLS Traffic based on Hybrid Sampling

Team Leader & Researcher

Mar 2023 - Jul 2023

- Awarded 2nd place at the Korea Simulation Academic Conference of the Korea Society for Simulation
- Initiated research on **malware detection** in **TLS-encrypted traffic** without requiring decryption to achieve more efficient classification compared with existing methodologies.
- Leveraged **ResNet-based CNN** and **FS-Net-based RNN** models to enhance classification accuracy and utilized Markov chain fingerprinting to model sequential TLS message patterns, effectively improving feature extraction while reducing false positives.
- Pioneered a hybrid data preprocessing technique combining random over-sampling and under-sampling to reduce dataset imbalance and enable the robust training of a machine learning model for malware detection.

Single Traveler Application "Eats-Mate"

Jun 2022 - Oct 2022

Team Leader & Full-Stack Developer

- Won 3rd place out of 156 teams at the Tourism Startup Contest of the Korea Tourism Public Institution & KAKAO
- Spearheaded development efforts and provided team leadership, guiding the project from conceptualization to an IR pitch.
- Directed the full-stack development of a practical platform, including the construction of a **React/Next.js** frontend and a **Spring Boot** based micro-services backend deployed on **AWS (EC2, RDS, S3)**.

TECHNICAL SKILLS

C/C++, Python, Java, Wireshark, Linux, MySQL, Docker, Next.js, React, SpringBoot, Akamai, AWS, Splunk