

PROFESSIONAL SUMMARY

- Versatile Backend Engineer with over 5 years of experience designing and developing scalable web services using Node.js, NestJS, and AWS. Proficient in Java and object-oriented programming, with strong expertise in RESTful API design, microservice architecture, and cloud deployment. Passionate about writing clean, maintainable code and continuously improving backend systems through Agile practices, testing, and DevOps automation.

EDUCATION

- **Soongsil University** Seoul, South Korea
Master of Engineering in Information and Communication Technology; GPA: 4.18/4.50 Sep 2019 – Aug 2021
- **Danang University of Science and Technology** Danang, Vietnam
Bachelor of Engineering in Information Technology; GPA: 3.2/4.0 Aug 2013 – Aug 2018

EXPERIENCE

- **Grid Solutions, Inc. (A SmartGrid solution startup)** Tokyo, Japan
Software Engineer (Remote, Full-time) Sep 2023 - Present
 - Designed and maintained multiple backend microservices using NestJS, TypeORM/Prisma, PostgreSQL, and AWS following Domain-Driven Design (DDD) and Clean Architecture principles to enhance scalability and maintainability
 - Deployed and optimized RESTful APIs used across internal systems, improving response times and service reliability.
 - Deployed production services using Serverless Framework and Docker on AWS Lambda, reducing operational overhead by 30%.
 - Partnered with cross-functional teams to translate complex business requirements into technical specifications.
 - Implemented automated testing using Jest and Supertest, improving code coverage and ensuring deployment reliability.
 - Mentored junior developers and participated in code reviews, promoting consistent coding standards and knowledge sharing.
 - Collaborated with DevOps teams to refine CI/CD pipelines using CircleCI, enabling faster, safer releases.
- **XB Technology Co., Ltd (A UAV Platform startup)** Danang, Vietnam
Middle Software Engineer Sep 2021 - Aug 2023
 - Engineered backend services for an e-commerce and billing system using NestJS, TypeORM, and PostgreSQL, applying OOP and DDD principles.
 - Designed and integrated RESTful APIs for payment processing with PayPal API, achieving a 25% improvement in transaction success rates.
 - Collaborated in an Agile team using Jira and Confluence, participating in sprint planning, retrospectives, and feature estimation.
 - Implemented real-time data exchange using MQTT, enhancing UAV system responsiveness and performance.
 - Containerized services with Docker and coordinated with DevOps on Kubernetes deployments for improved scalability.
 - Implemented CI/CD pipelines on Github Actions and CircleCI, reducing deployment times to under 5 minutes.
 - Supported junior engineers and reviewed pull requests to ensure clean, maintainable code aligned with system architecture.
- **Advanced Network Design & Analysis Lab. (Research on SDN & Cloud)** Seoul, South Korea
Research Assistant Sep 2019 - Aug 2021
 - Conducted research on Software-Defined Networking (SDN) and Network Function Virtualization (NFV) using Docker and VMware, improving network orchestration efficiency.
 - Authored and presented research in international conferences, demonstrating strong analytical and communication abilities.

PROJECTS

- **URL Shortener** NestJS, TypeScript, TypeORM, PostgreSQL, Amazon DynamoDB
github.com/kanelvurl-shortener
 - Built a scalable URL shortening service following Domain-Driven Design (DDD) and layered architecture principles.
 - Implemented structured API endpoints and improved modularity for easier extension and testing.

PROGRAMMING SKILLS

- Languages Java, Scala, Javascript, Typescript, Python
- Frameworks Node.js, NestJS, React, Play Framework, FastApi
- Architecture & Methodologies : Domain-Driven Design (DDD), Clean Architecture, OOP, REST API Design, Agile, Scrum
- Databases PostgreSQL, MongoDB, TypeORM, Prisma, Mongoose
- DevOps & Cloud AWS (EC2, S3, Lambda, API Gateway, DynamoDB, CloudWatch), Docker, Kubernetes, Github Actions, CircleCI, Serverless Framework
- Testing & Tools Jest, Supertest, Postman
- Version Control & Collaboration Git, Bitbucket, Jira, Confluence **Technologies** AWS, Play, React, Kafka, GCE