

Work Experience

Mar 2017 – Feb 2024 **Dux Global Services**

Web Developer and General Manager

- **Developing web applications** (PHP, MySQL, JavaScript, Laravel, VueJS, Tailwind, CodeIgniter, jQuery)
 - CRM & ERP (customer orders/data, invoicing/financial management, customs clearance integration, process tracking, trucking route management, document management, etc.)
 - online shops and websites (payment gateway integration, admin dashboards)
- **Server maintenance** (VPS in cloud, on-site Windows server)
- **Staff training** – How to use company systems/apps, freight forwarding basics, customs clearance, customer service, documenting, etc.
- **Building strategies to improve work efficiency and reduce costs**
- **Managing IT equipment and devices**
- **Research and application of new government regulations/systems to company's systems**
- **Managing sponsored workers**

2016 – 2017 **University of Greenwich**

Cloud Research Developer for Energy-aware Security

- **Writing programs for experiments** (Python, NumPy, TensorFlow, bash scripts) – Writing command-line tools to configure and deploy private cloud servers (OpenStack), writing programs to measure energy consumption of servers by reading values from power meters, consolidate measured data, convert it to different formats and visualise it, writing scripts to train intrusion detection models for robots using TensorFlow

2015 – 2016 **Dux Global Services**

Contract Web Developer

- **Building websites with CRUD functions** (PHP, MySQL, jQuery, CodeIgniter)

2011 – 2011 **King's College London**

Student Lab Assistant/Demonstrator

- **Helping 1st year computer science students out with programming exercises** (OOP concepts, data structures in Java, GUI programming in Java, how to use compiler, debugger, IDE, etc.)
- **Demonstrating/explaining solutions**

Skills

- PHP, SQL, JavaScript, Java, C/C++, Python, Shell Scripting
- Laravel, VueJS, InertiaJS, Tailwind CSS, CodeIgniter, jQuery
- Linux, Git, PHPUnit, Docker, HTML, CSS
- Agile Methodology, TDD, OOP
- Language - Korean (Native), English (Advanced)

Strengths

- **Problem solving** – Successfully identified and resolved various issues when building an ERP system and improving small freight handling process in warehouses, resulting in significant improvements to work performance and efficiency
- **Excellent teamwork** – Successful collaboration with cross-functional teams including managers, operators, and other developers

Education

2015 – 2018 **University of Greenwich**

Graduate research student – Energy-aware Security and Cloud Computing

- **Publications** – Cloud-Based Cyber-Physical Intrusion Detection for Vehicles Using Deep Learning (IEEE Access 2018)
Computation offloading of a vehicle's continuous intrusion detection workload for energy efficiency and performance (SIMPAT 2017)
Energy-Efficiency Evaluation of Computation Offloading in Personal Computing (ISCIS 2016)

2013 – 2014 **Middlesex University**

MSc Computer and Network Security – First Class

- **International merit award scholarship**
- **Distinction for dissertation** – Implementing a simulator for evaluating energy efficient broadcast tree algorithms for all wireless networks (Java, jGraphT, JFreeChart)

2009 – 2012 **King's College London**

BSc Computer Science – Upper Second Class Honours

- **Individual project** – Applying combinatorial optimisation methods to an automatic labeling system for point features on a map (C++, GTK/gtkmm)
- **Group project (project leader)** – Implementing Simultaneous Localisation and Mapping software for a robot (C/C++, opencv)