

Seunghwan Kim

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EDUCATION

The Korea Chamber of Commerce & Industry | *[intel] edge AI S/W developer Academy*

Incheon, Korea | **10/2023 - Present**

- Course contents
 - Procedures / Object-Oriented Languages -> C/C++, C#, Python
 - Firmware Programming -> Board used: "Nucleo f411 RE (ARM-M4)", Implementation of GPIO, timers, interrupts, and wireless communication
 - GUI Programming -> Understanding of UI/UX graphic objects, Development of cross-platform frameworks for different operating systems
 - Software Architecture -> Understanding and application of software design methodologies, Understanding of design patterns
 - Linux Server -> Understanding of the Linux operating system, Installation and setup of APM, Utilization of open-platform hardware
 - Edge Device Linux BSP -> Development of ARM Cortex-A series bootloader and hardware control, Linux kernel/device driver development, Development and methods of the root file system
 - Computer Vision and AI Machine Learning -> Structure and representation of images, optical understanding of image processing, Image detection and analysis algorithms using pattern matching
 - Edge AI Programming -> Understanding and programming of Edge AI workflows, Development of interfaces for inference, Data preparation and AI model development/inference

King's college London | *MSc Data Science*

London, UK | **09/2018 – 12/2019**

- Overall classification of the qualification: Pass with Merit (in original language: English)
- Dissertation title "*Optimal sensor placement for everyday motion tracking of a neurological patient*"

University of Manchester | *BEng (Hons) Electrical and Electronic Engineer*

Manchester, UK | **09/2015 – 06/2018**

- Overall classification of the qualification: Second Class, Division One (in original language: English)
- Embedded System Project for competitive exhibition
 - Manufacturing a Buggy (Miniature Car) for participation in a competition
 - Related link: "https://www.youtube.com/live/___h7GqIW3MI?si=ns6_9gCbBJsDUqX" for the competition
 - Controlling the Buggy using microchip Technology's 8bit PIC18 series MCU
 - A two-Year project from hardware design (schematic diagram) to mechanical structure design
 - Responsible for firmware software, programmed firmware to control sonar and Infrared sensors, enabling the Buggy to Follow obstacles and white lines on the floor (C language)
- Dissertation title "*Alternative high-power transmission technology using Gas Insulated Transmission Line (GIL)*"

Bellerbys College Cambridge | *Foundation degree for engineering*

Cambridge, UK | **12/2013 – 09/2014**

- Preparatory course for international students for admission to British universities

SKILLS

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|-------------------------------|-------------------------------------|--------------------------------------|
| • Programming language | C/C++, Python, SQL | Software Skills: Strong |
| • Software tools | STM32, arm Keil, MATLAB, R, LabVIEW | Technical skills: Strong |
| • Natural Language | Korean | Language proficiency: Native |
| | English | Language proficiency: Business level |

EXPERIENCE

HS Vina | *Head of RF technology*

Hochiminh city, Vietnam | **03/2022 – 03/2023**

- Incorporating adidas' eco-friendly RF technology and production methods, contributed to the commercialization of mass production technology by verifying defect rates, OEE improvement, and validating equipment software to facilitate a profit turnaround for the business.
- Every Tuesday, meetings with Adidas headquarters on production technology and mold development; every Wednesday, meetings with Kurtz Ersä technical team on hardware and software related to equipment performance enhancement.
- Production management, staffing, and equipment management in the RF department.

Startup company | Technical manager*Dalian, China | 01/2020 – 01/2022*

- Participated in a startup with the aim of developing DRT (Demand-Responsive Transportation) in China, but due to the management issues caused by the COVID-19 pandemic and the investment company, the business was halted during the incubation stage.

Watlow Pacific Inc. | Electrical Engineer*Dongtan, Korea | 02/2020 – 07/2020*

- Engaged in the production of electrical controllers, tailored to the semiconductor equipment standards of the customer (Samsung Electronics), and provided customer support (CS).

Self-employed (freelancer) | Heating jacket Technician*Dongtan, Korea | 06/2011 – 10/2013*

- As a engineer of heating jacket of semiconductor vacuum evacuation system, responsible for the maintenance of heating jackets heating vacuum pipe connected to the exhaust system (scrubber, pump and chiller) inside clean and facility sub fab of semiconductor and display manufacturing. In particular, in charge of maintaining and controlling the heating jacket's PLC controller.

MILITARY SERVICE

Republic of Korea Marine corps | sergeant signaller*Pohang, Korea | 08/2009 – 05/2011*

- Working as a communication soldier at the 1st Marine Division, 2nd Regiment FDC (fire direction center), managing a series of networks related to artillery shooting. Operating IBS (Inflatable Boat Small) as a secondary specialty, responsible for the communication soldier role in the maritime infiltration team. After completing 2 years of military service, honorably discharged as a Sergeant from the ROK Marine Corps.