**KIM, MOONHO**

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| **STRENGTHEN WORKING AREA**  **WORK EXPERIENCE**  **RESEARCH EXPERIENCE** | After working 5 years in Quality, I realized most quality problems were caused by fault in design. At the same time, I realized that most designs are driven by electrical/electronic systems. As a result, I decided to augment my skills with a Master's degree in Electrical and Computer Engineering at LTU. Throughout the related curriculum, I have become impassioned with Autonomous and Electric Vehicle, ADAS, DSRC, Vehicle to Vehicle communications, Software Engineering, System Engineering and Control Engineering. Thus, I am looking for a position in one of these technology areas. I will graduate on May 7, 2021.  ***Quality Control Team in Electronic Division***  **LS Automotive Co., Ltd, Gyeonggi-do, Korea (Jan 2012 – Mar 2017)**  **Quality Engineer(Assistant Manager)**  **[Design Management]**  ► Participated with cross functional teams (Design, Mold, Manufacturing, Quality, Project Manager, Suppliers and so on) on continuous improvement production design through CATIA, CAD, Mold-flow simulation.  ► Verified the DFMEA with cross functional teams and if lessons learned are implemented to reduce or eliminates the potential failures and prevent reoccurrence of previous failure.  ► Analyzed the test results, found root cause, and change the design as needed in major validation activities (DV/PV) and hands-on support of product builds  **[Manufacturing Management]**  ► Collaborated with Manufacturing Engineer to improve the design of new equipment and new lines and went over the PFMEA and Control plan documents to insure that the manufacturing processes are robust  ► Participated in Process Capacity Validation (Run @ Rate) with cross functional teams to analyze the results such as production capacity, process capability and verified Error-proofing to prevent errors that cause defects  ► Provided guideline to operator what to be cautious of and how to inspect in line to detect non-conforming product  **[Suppliers / Customers Management]**  ► Led the product PPAP process (including developing, reviewing and approving FMEAs, Control Plans, SPC, Run-at-Rates, MSA, Mil sheet, MSDS, Inspection reports, etc and take necessary actions as required).  ► Visited suppliers to analyses of quality concerns during Run-at-Rates and support  to solve problems and apply to control plan, FMEA, SPC.  ► Supported manufacturing locations on supplier related performance issues.  (conduct 8D verification, review containment process)  ► Follow-up evaluation / effectiveness check on problem parts to verify that  the supplier has followed through with acceptable and effective corrective action.  ► Worked with customers in response to audits, quality issues, PPAP approvals and providing support to the sales department as required.  ► Made presentation for corrective action report using the customer 8D / 5-Why form  as required  **Lawrence Technological University, Michigan, USA(Aug 2019 – Exp. May 2021)**  **M. Eng. in Electrical and Computer Engineering**  **Satellite Attitude Control (Aug 2020 – Dec 2020)**  ►Led group project for satellite attitude control to design Mathematically model the Continuous time System through Matlab, SimuLink.  ►Designed an appropriate discrete time controller (PD compensator) to meet the required performance criteria(peak overshoot <10%, settling time <2 sec) using the root locus and analyzed error  **Vehicle to Vehicle Communications (Jan 2020 – May 2020)**  ►Designed system and how to communicate V2V, V2I, V2X if the vehicle collision and emergency situation happen through DSRC(Dedicated Short Range Communication)  ►Improved EWCA(Enhanced Weight-based Clustering Algorithm) such as how to form a cluster group, select CH(Cluster Head) depend on Node connectivity level , Mean speed, Mean distance and how to maintain Cluster group(Leaving and Merging)  **Content-Based Music Information Retrieval: Current Directions and Future Challenges(Aug 2019 – Dec 2019)**  ►Led research of MIR(Music Information Retrieval) project to help customer to find music efficiently and to use the information that is being found among large amounts of information using different way of methods such as Metadata, Audio Analysis(Beat Tracking), Music Visualization and browsing(Musicream, MusicRainbow) |
| **MILITARY SERVICE** | ***Military Service***  **36th Regiment, 5th Division, Gyeonggi-do, Korea (Jan 2007– Dec 2008)**  ► Development of Intelligence reports and Intelligence Situation Maps  ► Assisted Intelligence Officers  ► Processed reports of Subordinate Units |
| **EDUCATION** | **Lawrence Technological University, Michigan, USA (Aug 2019 – Exp. May 2021)**  M. Eng. in Electrical and Computer Engineering  ► GPA 4.00 / 4.00  **Hanyang Cyber University, Seoul, Korea (Mar 2018 – May 2019)**  B. Eng. in Electrical and Electronic Engineering  ► Approved 70 Credits for Transferred Student  ► GPA 3.95 / 4.5  **Gachon University, Gyeonggi-do, Korea (Mar 2005 – Dec 2011)**  B. Eng. in Industrial Engineering  ► GPA 4.17 / 4.5 |
| **SKILLS** | ► A familiarity with automobile industry standard, best practices, and an ability to  apply such concept to longer term quality improvement strategies.  ► Excellent written and verbal communication and interpersonal skills and strong  teamwork relationships.  ► Good communication skills and ability to work with teams spread across the globe.  ► Good at Microsoft Office Excel, Words, Power Point  ► Good at **Autoware(Linux, ROS, Python)**, **MATLAB**, **Simulink**, CAD, Minitab |
| **AWARD &**  **GRANT** | ► Scholarship for Achieving High GPA during B. Eng. Program (2009, 2010, 2011)  ► Scholarship for Achieving High GPA during Diploma Program (2006, 2007)  ► Scholarship for Entering with High Qualifications (2005) |
| **ACADEMIC & PORFESSIONAL ACTIVITIES** | ► ISO/TS 16949:2009 Internal Auditor Course by DQS UL Korea LLC (2014)  ► ISO 14001 and OHSAS 18001 Internal Auditor Course by DQS UL Korea LLC (2014)  ► ISO/IEC 27001:2005 Information Security Management System Auditor Course by MSA Certification Co., LTD (2012)  ► ISO 14001:2004 Environment Management System Auditor / Lead Auditor Course by MSA Certification Co., LTD. (2012)  ► ISO 9001:2008 Quality Management System Auditor / Lead Auditor Course by MSA Certification Co., LTD. (2012) |