SEOK LEE

Quality level-headed leadership:

- 14 years experience in engineering leadership, technical research, business development between 3 companies
- Comfortable and confident in team dynamics and leadership
- Strength in support and directive driven within teams
- Able to successfully navigate uncertain and unplanned events to find effective and efficient resolution
- Experience in building correct teams for different projects
- Able to determine strengths and weaknesses to correctly guarantee advancement through projects

Understanding in diverse office settings:

- Experience in diverse office settings; various countries (6.5 years in European assignment)
- Adaptable to different expectations within different companies
- Focused on growth within companies for myself and coworkers to advance the company itself
- Heightened interpersonal skills

Passion for Data Analysis and Engineering:

- Completed Masters in Engineering and MBA in Business Analytics, Globalization
- Knowledgeable in: mathematical dynamic modeling, controls design, plant modeling, data analysis, virtual 3D simulation (Unreal), model based design , and capable of coding (R, MATLAB, C++,C, Python).
- Eager to enhance my knowledge and understanding in various areas
- Quick to learn new systems
- Passion for solving complex problem Looking for growing together with the company:
- Wanting a partnership with a company I can grow with
- Willing to relocate for position if the company is the correct fit

EDUCATION

10/2017–08/2021 — **University of Illinois**
MBA-Financial Mngt|Value chain Mngt|Managerial Economics&Business Analysis|Strategic leadership & Mngt|Business Analytics|Global Challenge in Business
Urbana, IL

01/2005–04/2010 — **University of Michigan**
M.S. in Mechanical Engineering
Dearborn, MI

1998–2005 — **Korea Aerospace University**
Bsc. in Mechanical Engineering
Korea

CONTACT INFO

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TOOLS

Data analytics: R | Python | MATLAB

Engineering: Simulink | CarSIM | AMESim | Targetlink | CAN | C++ | Tensorflow | OpenCV | Keras | Unreal

LICENSE

Professional Engineer(Mechanical Eng- Thermal & Fluid, MI license # 6201066645)

Udacidty Self driving car #5R7RH56H

Last updated on 2022-01-27.

NOTABLE EXPERIENCE

06/2021–present

Canoo

Senior Technical Team Lead - Electronics — Torrance, CA, USA

- Upon graduating with an MBA, I wanted to explore a broader spectrum of vehicle integration work. I am interested in how a vehicle is designed, developed, tested, and launched. How a company constantly pleases consumers' eyes and pockets, but another fails to meet consumers' appetite.
- I also wanted to experience how a new company becomes an incumbent. Therefore, I chose to make a transition to a start-up. The day to day job includes, but is not limited to conducting engineering electronic requirement definition for future products- benchmark, initial market research, pinpoint technology gap, share insight, and set the roadmap for corporate ADAS, On Board Charger (OBC), telematics, V2X and infotainment strategy.

04/2019–06/2021

Ford Motor Company

Research Engineer- ADAS simulation — Dearborn, MI, USA

- I developed a s/w interface to take ray tracing radar signals into vector transform to feed to ADAS controller for simulating driving condition. Later, I developed 3d scenes in urban parking using a 3d gaming engine (aka Unreal).
- In the end, I integrated 3d scenes and developed a sensor interface to test out certain traffic scenarios (i.e. highway following, parking lot) to test out various ECU controls s/w codes in vehicle system level under realistic simulation environment. Before exit, I do demonstrate the s/w testing framework to other engineers for training purposes to enable them to get familiar with desktop testing capability

11/2015–04/2019

Ford Motor Company

Autonomous Controls Engineer — Dearborn, MI, USA

- I tested in-house developed chassis controls s/w against requirements using MATLAB/Simulink tool. Later, I refactored (effectively simplified) the developed software (s/w) to conform to ISO 26262 (functional safety) standard.
- Later, for testing purposes, I developed the simplified, but approximated mathematical models and suggested s/w architecture to test out s/w code under real-time simulation framework.
- In the end, I managed to integrate refactored s/w into a driving simulation environment to conduct repetitive testing. This entire work received 3 Ford internal awards which led me to focus on more simulation work for my next move.

04/2014–
11/2015

Cummins Engine Company
Diagnostic Team Leader
Columbus, IN, USA

- I led a team of calibration engineers. The calibration contents are related to thermal management for controlling the catalytic events. I always looked for how to make our team better and thrive spontaneously by demonstrating leadership by example. I let team members taste different management styles - servant management.
- I provided training, coordinated vehicle/ engine testing works to meet the Euro environmental regulatory requirement while I conducted data mining, data analysis to check the calibration performance to approve quality contents in the field operation.

07/2011–
04/2014

Cummins Engine Company
Thermal Controls Technical Specialist
Darlington, UK

- I came back to the US headquarters after 6.5 years of overseas work. I led a team of calibration engineers. The calibration contents are related to thermal management for controlling the catalytic events.
- I looked for how to make our team better and thrive spontaneously by demonstrating leadership by example. I tried for team members to experience different management style. The job included employee training, coordinated vehicle/ engine testing works to meet the environmental regulatory requirement while I conducted data mining, data analysis to check the field performance of calibration to approve quality contents in the field operation.
- After completion of a project, I pursued an opportunity to utilize my learned knowledge from graduate school in the passenger vehicle industry.

10/2007–
07/2011

Cummins Engine Company
Senior Control Engineer
Eindhoven, the Netherlands

- I started as a controls engineer which handled input/output processing of devices (sensors, actuators), rapid prototyping of controllers, controls integration work with an emphasis on wiring harness design, hardware validation, and CAN (Controller Area Network) signal definition.
- I spent a handful of time for s/w validation and testing at HiL (Hardware in the Loop) and vehicle level. This work was carried out as a customer facing role at an international site, a Dutch truck company (DAF trucks, NV). I adapted cultural differences quickly while embracing and valuing Dutch culture to harmonize between two entities.

01/2005–
03/2010

Research Assistant
University of Michigan
Dearborn, MI

- I came to the US to study abroad because I won full tuition supported research assistant scholarship to work on mathematical modeling and simulation for nonlinear dynamic systems.
- Although the school is a regional school and relatively unknown to the public, I did my best to produce a fruitful outcome. In the end, I was able to publish 2 papers and 1 technical report before graduation.

PUBLICATIONS

2008

Investigation of Sliding-Surface Design on the Performance of Sliding Mode Controller in Antilock Braking Systems

IEEE Vehicular Technology, Volume 57 issue 2

Taehyun Shim, Sehyun Chang, **Seok Lee**

2007

Technical report- Brake design and modeling of Low Mass Vehicle

IAVS (Institute of Advance Vehicle System), University of Michigan-Dearborn

Seok Lee

2006

Development of a Brake System for Lightweight Vehicle

IMECE2006-15437, pp. 229-238; 10 pages

Seok Lee , Taehyun Shim , Byung-Kwan Cho