

March 8, 2021

ENGR 520 Intro to Portfolio

Ga Young Lee

### Professional Goal

By 2030, I will run a database architect company that focuses on building highly scalable and adaptable software that can store medical data and financial data with heightened encryption and compatibility with other systems. The software should be able to retrieve petabytes of data consisting of trillions of records efficiently with less than ten nanoseconds and allow access from multiple sources without degrading the integrity of the data. Due to these unique features and high performance, the architecture I build with my team will be used worldwide to solve problems in interoperability issues of healthcare data and high-frequency trading.

To accomplish this goal, I can take five steps as follows:

1. Understand the foundation of database architecture thoroughly in grad school and take relevant courses such as CS 540 Database Management Systems and CS 549 Scalable Machine Learning and Query Processing.
2. Gain practical skills through internships and industry experience as a Backend Engineering and Software Architect to identify a problem and implement a solution.
3. Find like-minded people who I enjoy spending time and working with to build a strong team with a growth mindset and life-long learning culture through participating in hackathons, volunteering activities, and networking events.
4. Strengthen my baseline strength, both physically and mentally, through regular exercise and a healthy lifestyle to develop resilience and flexibility so that I can make sound decisions even in a stressful situation.
5. Seek out knowledge and continue learning and honing skills even after graduation to ensure I can keep up with the latest advancements in the field and be open-minded and curious about the changes around the world. It would be nice if I publish my findings along the journey to share them with others.