

Self-Reflection on Learning Outcomes for Diploma Work

Through my master's project I was fortunate enough to work with both KTH University and the Research Institute of Sweden (RISE). In this project I learned about how Photonics is implemented to construct a communication system. I implemented the knowledge acquired through my courses to model the physical system, and I also acquired new skills when simulating and implementing in a real application. In KTH their expertise in optical communication gave me insight into the current developments in the field. This insight into the current interest of optical communication inspired me and my supervisors to use machine learning to improve the system performance.

I felt very fortunate to have this experience, I was able to learn a lot about the optical communication industry in RISE Kista High Speed Transmission Lab. The approach that I implemented to treat optical communication was through my fundamental understanding of Photonic to describe the system. The physical description of the system was an implementation of the knowledge acquired during my studies in Lund. From the simulation I was able to learn how to confront a real implementation given the expertise at KTH. The computational component was done given my interest in programming. It was a good interesting challenge to construct a system that had limitations and with real specifications. This project also required me to think individually and autonomously, developing my understanding and the thought process around constructing a research objective due to a practical implementation or simulation.

The main take away from my learning experience through this project was to pursue an idea through discussion and iteration. In my studies I was able to develop a good relationship with some of my lecturers, how gave me valuable insight through my project when I discussed with them the work I had carried out. On a personal note I also learned a lot about myself and what I am looking for in life, this experience has made me learn about how fast and beautiful life is. Even though there were a lot of rough patches along the way, I made the right choice coming to Lund.

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