

**Student End of Term Evaluation**



Name: Oleksii Fedorenko School: Case Western Reserve University

Department: Software Development Degree/Major: Computer Science

Supervisor: Robert Stevens Grad. Date: May 2023

***1. Describe your responsibilities and project(s).***

I was working on implementing a new feature that is a part of initiative “Bring Emotion to Light”. My project is laying ground for the other features in this initiative. In a nutshell, I am using remote ML algorithm to predict the area type based on the area name and storing it in the database. In the future, the area type is going to be used to suggest scenes to the user.

During the downtime on the main project, I showed an initiative to work on a secondary project. That project is designed to help the x-ray operator to process the manufactured boards and store the scanned data in the database.

***2. What were your major accomplishments?***

Implementing a new submodule for the Condor API integration that would allow for communication with a remote ML algorithm. In addition to that I integrated the submodule into a Lutron Designer application to seamlessly predict the area type for each change in area name.

On my secondary project, I developed the architecture of the application from scratch using MVVM design patterns and developed logic to parse data outputted by the x-ray machine.

1. ***Which activities did you find most satisfying?***

On the main project it was the most satisfying to learn about the architecture of the Lutron Designer and also developing a new submodule for Condor API integration.

I really liked my secondary project overall, especially developing the architecture of it, but also some of the logic involved in parsing and storing data.

1. ***What challenges did you face? Did you overcome them? If so, how?***

In the main project it was quite difficult to grasp the structure of the project at first. There are a lot of right ways to implement features, but only a few that would be considered a good practice for the project. And that would be fine, but due to delays with reviews and me not being too experienced in the best practices, I had to make some structural changes later on in the project. For example, storing an enum for area types was at first planned to implement through Model info database, but then decided to be implemented through a regular enum. Another example is implementing new properties of an area as a separate table in the database, instead of adding new columns to the existing one. Updating the Project DB is in of itself is difficult due to the challenge of people updating the DB before you and having to update the version every time.

For the x-ray tool, the challenge was deciding the framework to work on. Initially, I decided to use tkinter, which was an improvement over the proposed matplotlib. However, with an increasing level of complexity of the UI features, I decided to transition into C# .NET framework and had to redo all the implemented features there. Also, on C# I ran into the issues with WPF, because I am not a big fan of binding magic and it is hard to debug the errors associated with binding.

***4. What areas do you feel you could improve?***

I could definitely improve my understanding of communication between layers withing the MVVM design pattern. For example, event tracking, publisher and subscriber pattern, WPF binding, observer pattern, etc.

5. Did your co-op/intern experience meet your expectations (type of work and amount of work)? If not, please give specifics.

Yes. After grasping the bureaucracy, it was a fulfilling experience.

***6. Do you feel you received adequate training and supervision? Why or why not?***

Yes. Always had help or recommendations on what to do to resolve the issues.

***7. Can you identify 3 people that were the most valuable during your time at Lutron?***

Grant Oesterling, Peter MacLellan, Nathan Caldwell

***8. What are your impressions of Lutron as a place to work?***

Very responsive, friendly, not high-pressure environment.

***9. What suggestions do you have for improving our Co-op/Intern program?***

Scrap or significantly change the co-op group presentation for the engineering interns, we are not sales people.

***10. Any additional comments?***

We are glad that you could join us for your co-op/intern experience. Thank you for taking the time to complete this evaluation; your comments are very important to us. Please return your completed form to your supervisor.

Signature: Supervisor:

Date: Date: