Statement of Work

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Much of the physical material necessary for this project is extant lab equipment used by the Physics Department for various research and educational purposes. However, much of the software that is specific to this project is proprietary and thus incurs licensing fees. Furthermore, learning the domain and actually writing signal processing procedures using this software will have labor costs. Deliverable items are: learn the domain, write simulation software, make improvements to existing codebase, and finally write software for real-time SPIFI imaging, in that order. A breakdown of the estimated costs and expected delivery dates can be found in Table 1. The cost of learning the domain knowledge can be estimated by the time required for me to do so, and my hourly wage as a software developer (roughly $44.00/h, or $352.00 per week, given that I spend 8 h per week on it on average). Currently, five weeks have gone by, and it’s estimated that a further two will be spent on this, resulting in the given total. The development of simulation software to aid in system design will take a long time to write. While currently the plan is to write the simulation in a free and open language, much of the existing material that will be built upon is written in Wolfram Mathematica, which has a license fee of at least $1150.00, and code written in that language typically cannot be viewed without it. Simultaneously, code written in C# for existing systems will be improved upon. This requires the use of Microsoft Visual Studio, which has a $500 licensing fee, which only runs on the Microsoft Windows Operating System, itself having a licensing fee of at least $120.00. While and after these goals are being met, I will develop Real-Time SPIFI imaging software, using only free and open technologies.

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| **Deliverable** | **Expected Delivery Date** | **Estimated Cost** |
| Domain Knowledge | Oct. 21 2016 | $2464.00 |
| Simulation Software | Mar. 10 2017 | $8190.00 |
| Improve Existing Codebase | Mar. 10 2017 | $7660.00 |
| Real-Time SPIFI Imaging | May 26 2017 | $9856.00 |
| **Total** | **May 26 2017** | **$28,170.00** |

I do not know how to evaluate this paragraph. You have certainly crammed a lot of information into it, but you do not show the duration of any activity, for example, and the cost analysis is incomplete. Table 1 sort of combines a limited timeline with a cost analysis, but they are typically two separate items. In your final report/proposal, please use the floating bar Gantt chart for the timeline and the Excel spreadsheet for the cost analysis, and clearly distinguish between the timeline and the cost analysis. The timeline should show beginning and ending dates. It should not begin until after the proposal date, say, early December or perhaps January 10. It could stand to be more detailed than what you have in your Table 1: for example, you say “improve code base”; surely that involves more than one activity, so spell them all out and estimate the time required for each (the timeline is supposed to help you plan, and if it is too coarse, then it has no value).



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