

Journal of Venu M Kotha for Fall 2006

1 Week 1, September 7 – 14 (The Mathematical Autobiography week)

I went through the handouts twice to get a better idea and understand what exactly Dr.Martin is expecting from this task. I started practicing Latex, I tried to implement sample mathematical equations and understood how few commands work. I realized Latex does not have a built in spell check. Then started making a rough draft of my math autobiography in MS-WORD.After I was done with the rough draft, I typed it in Latex.

Goals for next week : To learn and understand more about Latex.

2 Week 2, September 14 – 21 (The Greens Function Algorithm week)

I started with reading the handouts few times and understood how the algorithm should be developed. I noted down all my ideas on a paper, so that I can discuss about them with my other team mates in the meeting. We actually met twice in this week, in the first meeting we discussed about how much each one of us understood from the handouts and what Dr.Martin has spoke about in the meeting on Thursday. I came up with the idea of having two text files instead of one, I thought it will make the logic of the code easier. I discussed about this with my team mates in the second meeting, and everyone thought it was a good idea. Once we decided upon the algorithm we typed it in Latex.

Goals for next week : Modify the algorithm with the corrections.

3 Week 3, September 21 – 28 (The Algorithm Modification week)

I went through our algorithm few times, so that I could make it better and came up with few corrections. I read the other team's report and made few corrections. Once I made the corrections, I placed it in Adrian's mailbox. Our team had 2 meetings this week too. In these meetings we discussed and corrected the mistakes we did in our algorithm earlier. Everyone found one or two corrections in other teams report, we spoke about them too. In the second meeting we figured out the testing part of the algorithm.

Goals for next week :

We are planning to divide the algorithm into tasks, and start working on it. Try to read more about python.

4 Week 4, September 28 – october 4 (Module 5 (choose_ekfile) week)

Started off coding the program in python, took a while to learn the syntax, but tried my best to come up with the subroutine(choose_ekfile) by tuesday, after Dr.Martin has made the changes to my code, I typed it in python IDE and mailed it.Learnt a lot about python programming this week. Understood the concept of loops, lists and functions.

Goals for next week : To learn more about python programming and get all the modules together and run it successfully.

5 Week 5, October 5 – 12 (Python code modification and complete journal week)

This week I went through the comments made by Dr.Martin and corrected my autobiography. I have gone through the logic of the python code many times to understand each module perfectly. Although I understood the logic, I feel I should learn more about python. I converted the autobiography to a pdf file and mailed it.

6 Week 6, October 12 – 18 (The OverT.py Execution week)

Once I got the OverT.py, compiled it few times to check for the output. I got familiar on how to compile and run a program code in python compiler(Active python IDE). I also made attempts reading the research paper given, but it took me a lot of time to understand, although I read it few times I got a vague idea on whats going on.

Goals for next week : To understand the content of the research paper as best as I can.

7 Week 7, October 18 – 25 (The Reasearch Topic Selection week)

I looked over the internet for the two research paper topics given to me, but I found only one paper, and the other one was not available in library too. I used google scholar to find my papers, its a good source and most of the journal papers could be found. Google scholar directed me to SIAM website where Ohio University students can access the content of the website as it is subscribed to SIAM. I read the paper written on the Improved Fast Mutlipole Algorithm, but I dint understand most of it.

8 Week 8, October 25 – November 2 (The Reasearch paper presentation week1)

I looked over the internet for basic definitions of the terms that I came across in the research paper I was reading. Since it is a physics research paper, It was very difficult to correlate the formulas derived and the application of these formulas in physics concepts. I cannot attend the research meeting this week as I have a job interview scheduled on the same day in columbus.

9 Week 9, November 2 – November 9 (The Reasearch paper presentation week2)

I prepared a powerpiont presentation of the Improved Fast Multipole Algorithm, research paper. I basically concentrated on the abstract, introduction and conclusion parts.

10 Week 10, November 9 – November 15 (The Reasearch paper presentation week3)

After my presentation, I got a positive feedback, although there were few things I should be concentrating, while giving a presentation the next time. Things like, using laser pointer, having the system positioned in a convinient place, so that I can have a constant look at the audience, I should try to have few examples, so that my presentation becomes more intresting. Iam sure I learnt new things. It was nice attending other members presentations as well.