Supervisor: Loidl Hans-Wolfgang

Sprint Log

Before 04/05

Task	Done	In-Progress	To Do
Setting up the docker environment	Х		
Exercises in haskell	Х		
Exercises in GpH	Х		
Creation of the GitHub repository	Х		
Optimisation of the algorithm computing the sum of Euler totient	Х		
computations in parallel			
Sequential and parallel profiling, runtine measurements	X		
Setting up threadscope	Х		
Sequential implementation of the resultant			X
Create runtime graphs			X
File discussing performance information			X
Sprint Log file at the top level of the repository			X
Try to execute GpH program on MACS Linux severs			X

<u>05/05 – 11/05</u>

Task	Done	In-Progress	To Do
Sequential implementation of the resultant		X	
Create runtime graphs		X	
File discussing performance information		X	
Try to execute GpH program on MACS Linux severs	X		
Familiarization with python scripts to call command line functions	X		
and get their results			
Sprint Log file at the top level of the repository			X
Execute the Sum Euler on 64-cores servers			X

<u>12/05 – 18/05</u>

Task	Done	In-Progress	To Do
Sequential implementation of the resultant	Х		
Create runtime graphs		X	
File discussing performance information		X	
Sprint Log file at the top level of the repository		X	
Execute the Sum Euler on 64-cores servers		X	
Implementation of the univariate resultant using the determinant	Х		
of the Sylvester Matrix and PLU decomposition			
Implementation of the univariate resultant using a recursive	Х		
algorithm and Euclidean division			
License added to the start of the code	X		
Performance analysis of the sequential Resultant			X
Implement the Laplace expansion			X

<u> 19/05 – 25/05</u>

Task	Done	In-Progress	To Do
Create runtime graphs	Х		
File discussing performance information		X	
Sprint Log file at the top level of the repository	Χ		
Execute the Sum Euler on 64-cores servers	Х		
Performance analysis of the sequential Resultant		X	
Implement the Laplace expansion			X
Creation of a python script allowing to create productivity and runtime	Х		
graphs			
Sprint Log file improved	Χ		
Introduce parallelism into the PLU and Laplace algorithms			X