

Week 2:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures	1	1	1	3	3
General admin	1	1	1	3	3
Meeting				0	0
Documentation				0	0
Scientific theory				0	0
Development				0	0
Testing				0	0
				0	0
				0	0
Weekly sum	2	2	2	6	
Total sum	2	2	2		6

<i>Completed</i>	<i>Lectures at campus</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<i>Meeting at Geomatikk IKT on wednesday.</i>

Week 3:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	3
General admin	2	2	2	6	9
Meeting	1	1	1	3	3
Documentation				0	0
Scientific theory				0	0
Development				0	0
Testing				0	0
				0	0
				0	0
Weekly sum	3	3	3	9	
Total sum	5	5	5		15

<i>Completed</i>	<i>Meeting with Geomatikk IKT and a general discussion within the group to share thoughts about the problem.</i>
<i>Project status</i>	<i>Result: OK Time: OK Progress: OK Cooperation: OK</i>
<i>Problems</i>	<i>We are not quite sure where to begin to handle the problem.</i>
<i>Measures</i>	<i>Literature, research and brainstorming.</i>
<i>Tasks for next week</i>	<i>Tuesday and Wednesday: Lectures at campus. Thursday: First day at Geomatikk. Friday: Lectures at Catch IDI about machine learning.</i>

Week 4:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures	8	8	8	24	27
General admin				0	9
Meeting	1	1	1	3	6
Documentation	1	1	2	4	4
Scientific theory	8	8	7	23	23
Development				0	0
Testing				0	0
				0	0
				0	0
Weekly sum	18	18	18	54	
Total sum	23	23	23		69

<i>Completed</i>	<i>Some research at Catch IDI, and setting up the timelist.</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i> <i>We are ready to start developing a solution, and feel like we are on track although we are a little behind on hours.</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - <i>Prepare the presentation for the workshop in scientific theory.</i> - <i>Do more research to decide on which technology to use</i> - <i>Start developing a simple model</i>

Week 5:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures	2	2	2	6	33
General admin	2	1.5	1.5	5	14
Meeting	1	1	1	3	9
Documentation				0	4
Scientific theory	12	12.5	8	32.5	55.5
Development	16	14	18.5	48.5	48.5
Testing				0	0
				0	0
				0	0
Weekly sum	33	31	31	95	
Total sum	56	54	54		164

<i>Completed</i>	<i>Began work on three different models (Doc2Vec (August), tf-idf (Joakim) and deep learning (Rolv-Arild))</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i> <i>We have made working prototypes of two models. Both models measure an accuracy of around 60% on detecting whether two consecutive pages belong together.</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Meeting with Ole Christian - Continue work on the models. Improve accuracy. Test more.

Week 6:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures	2	2	2	6	39
General admin				0	14
Meeting	1	1	1	3	12
Documentation	1			1	5
Scientific theory	5	3	4	12	67.5
Development	13	16	17	46	94.5
Testing	6	6	4	16	16
				0	0
				0	0
Weekly sum	28	28	28	84	
Total sum	84	82	82		248

<i>Completed</i>	<i>Continued working on the models. CNN model has been tested.</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i> <i>CNN model initial tests show around 60% accuracy.</i>
<i>Problems</i>	<i>Initial results turned out to be wrong. Doc2Vec and Tf-idf models actually show an accuracy of slightly above 50%.</i> <i>To train the CNN more efficiently we could use a GPU, but the firm can't distribute the documents to our private computers.</i>
<i>Measures</i>	<i>Try to come up with a solution that works for the firm.</i>
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - <i>Innovation camp monday-wednesday</i> - <i>Adjust models and run more tests.</i>

Week 7:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	12
Documentation				0	5
Scientific theory			5	5	72.5
Development	5	4	3	12	106.5
Testing	4	5		9	25
				0	0
				0	0
Weekly sum	9	9	8	26	
Total sum	93	91	90		274

<i>Completed</i>	<i>Started researching the n-gram algorithm</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<i>Experimenting and start working on the theory of the final report.</i>

Week 8:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	12
Documentation		8	19	27	32
Scientific theory	8	4	6	18	90.5
Development	14	12	2	28	134.5
Testing	12	15	6	33	58
				0	0
				0	0
Weekly sum	34	39	33	106	
Total sum	127	130	123		380

<i>Completed</i>	<ul style="list-style-type: none"> - Quite a bit of experimenting with the models. - Most of the theory of the report is done. - Obtained PC with GPU for testing
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	<i>Wasn't able to set up TensorFlow for the GPU</i>
<i>Measures</i>	<i>Try to reinstall</i>
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Maybe a meeting with Ole. - More experimenting - Complete the theory - Fix tensorflow GPU

Week 9:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	12
Documentation			6	6	38
Scientific theory	4	2	7	13	103.5
Development	18	17	12	47	181.5
Testing	11	15	8	34	92
				0	0
				0	0
Weekly sum	33	34	33	100	
Total sum	160	164	156		480

<i>Completed</i>	<ul style="list-style-type: none"> - Fixed tensorflow GPU (Rolv-Arild) - Created and tested n-gram model (Joakim) - Combined image size and average rgb-models (Rolv-Arild) - Started working with a model based on co-occurrence matrix (August) - Combined image size, average rgb and n-gram models (Joakim) - Acquired a new dataset (Hamar)
<i>Project status</i>	<p>Result: OK Time: OK Progress: OK Cooperation: OK With the combined models we have been able to break 70% accuracy.</p>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Meeting with Ole on thursday - Create a measurement of how well the models perform on single-page vs multi-page documents. - Write about previous work in the report - Test models on new dataset

Week 10:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting	1	2	2	5	17
Documentation			9	9	47
Scientific theory	4	1	13	18	121.5
Development	10	17	6	33	214.5
Testing	8	13	4	25	117
				0	0
				0	0
Weekly sum	23	33	34	90	
Total sum	183	197	190		570

<i>Completed</i>	<ul style="list-style-type: none"> - Meeting with Ole - Meeting with Per Inge
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Exam

Week 11:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	17
Documentation			3	3	50
Scientific theory	5		1	6	127.5
Development	4	4	1	9	223.5
Testing	4	5	3	12	129
				0	0
				0	0
Weekly sum	13	9	8	30	
Total sum	196	206	198		600

<i>Completed</i>	- Added min-pooling for the CNN-model
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Combine models - Test classification with segmentation

Week 12:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	17
Documentation	2			2	52
Scientific theory	13	1	6	20	147.5
Development	15	23	20	58	281.5
Testing	12	21	15.5	48.5	177.5
				0	0
				0	0
Weekly sum	42	45	41.5	128.5	
Total sum	238	251	239.5		728.5

<i>Completed</i>	<ul style="list-style-type: none"> - Started the work with a new <i>n</i>-gram model. - Put together a model combining all the other models, and tried to adjust the parameters. - Made the first test of classification. The segmentation model improved the result of the classifier by 0.3 %
<i>Project status</i>	<p>Result: OK Time: OK Progress: OK Cooperation: OK</p> <p>The combined model gets an accuracy of about 77% on its own, but doesn't improve the classification significantly.</p>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Acquire two new testing datasets. - Test the segmentation model with the classifier on the new datasets. - Begin the work on a new model that looks at dominant colors in the picture.

Week 13:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting			1	1	18
Documentation				0	52
Scientific theory	15	6	5	26	173.5
Development	15	24	18	57	338.5
Testing	12	25	16	53	230.5
				0	0
				0	0
Weekly sum	42	55	40	137	
Total sum	280	306	279.5		865.5

<i>Completed</i>	<ul style="list-style-type: none"> - Started work on new classification models for images and text - Found related dataset that enables us to do faster training at home
<i>Project status</i>	<p>Result: OK Time: OK Progress: OK Cooperation: OK Over 80% classification accuracy</p>
<i>Problems</i>	<ul style="list-style-type: none"> - Training is slow due to lack of processing power
<i>Measures</i>	<ul style="list-style-type: none"> - We have spoken to the firm about possibilities of acquiring a more powerful GPU
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Continue work on classification models

Week 14:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	18
Documentation		2	8	10	62
Scientific theory	15		10	25	198.5
Development	16	17	9	42	380.5
Testing	10	21	10.5	41.5	272
				0	0
				0	0
Weekly sum	41	40	37.5	118.5	
Total sum	321	346	317		984

<i>Completed</i>	<ul style="list-style-type: none"> - <i>Optimized classification model performance</i> - <i>Ran some tests</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i> <ul style="list-style-type: none"> - <i>Approaching 90% classification accuracy on both classification models</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - <i>Meeting with Ole Christian on tuesday</i> - <i>Receive new computer with GPU for faster training</i>

Week 15:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting	2	2	2	6	24
Documentation	2	8	20	30	92
Scientific theory	10		8	18	216.5
Development	15	12	1	28	408.5
Testing	12	12	3	27	299
				0	0
				0	0
Weekly sum	41	34	34	109	
Total sum	362	380	351		1093

<i>Completed</i>	<ul style="list-style-type: none"> - Meeting - Prepared for model training during easter break - Wrote some on report
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	<ul style="list-style-type: none"> - Could not get new GPU
<i>Measures</i>	<ul style="list-style-type: none"> - Guess best parameters for training - Train on separate dataset at home
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Easter break

Week 16:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	24
Documentation	2	1	8	11	103
Scientific theory				0	216.5
Development	10	3		13	421.5
Testing	3	3		6	305
				0	0
				0	0
Weekly sum	15	7	8	30	
Total sum	377	387	359		1123

<i>Completed</i>	<ul style="list-style-type: none"> - <i>Easter break</i> - <i>Some development and documentation</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - <i>Complete draft for theory and previous work in the report.</i> - <i>Continue running tests to obtain results.</i>

Week 17:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	24
Documentation	2	16	13	31	134
Scientific theory		4	10	14	230.5
Development	20	4		24	445.5
Testing	11	8	9	28	333
				0	0
				0	0
Weekly sum	33	32	32	97	
Total sum	410	419	391		1220

<i>Completed</i>	- Completed draft, and sent it to Ole for feedback.
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	- Receive feedback from Ole and rework the report.

Week 18:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting				0	24
Documentation	2	8	24	34	168
Scientific theory	2		8	10	240.5
Development	15	8		23	468.5
Testing	15	16	6	37	370
				0	0
				0	0
Weekly sum	34	32	38	104	
Total sum	444	451	429		1324

<i>Completed</i>	<ul style="list-style-type: none"> - Received feedback on parts of the report, and reworked it. - Filled in results from the text model.
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	<ul style="list-style-type: none"> - Missing some results for image model. Training is slow.
<i>Measures</i>	<ul style="list-style-type: none"> - Train over the weekend
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Meeting with Ole Christian - Test image model

Week 19:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin				0	14
Meeting		1	2	3	27
Documentation	10	12	24	46	214
Scientific theory	4		7	11	251.5
Development	10	8		18	486.5
Testing	10	12		22	392
				0	0
				0	0
Weekly sum	34	33	33	100	
Total sum	478	484	462		1424

<i>Completed</i>	- Meeting with Ole Christian
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	<ul style="list-style-type: none"> - Write documentation (discussion and conclusion) - Start preparing presentation

Week 20:

Activity	August	Rolv-Arild	Joakim	Weekly sum	Total SUM
Lectures				0	39
General admin			1	1	15
Meeting				0	27
Documentation	14	28	24	66	280
Scientific theory			4	4	255.5
Development	8			8	494.5
Testing	4	8		12	404
				0	0
				0	0
Weekly sum	26	36	29	91	
Total sum	504	520	491		1515

<i>Completed</i>	- <i>Finished the project</i>
<i>Project status</i>	<i>Result: OK</i> <i>Time: OK</i> <i>Progress: OK</i> <i>Cooperation: OK</i>
<i>Problems</i>	
<i>Measures</i>	
<i>Tasks for next week</i>	- <i>Submit project</i> - <i>Presentation</i>