

Project Name	amos-ss2021-neural-network-enablement
Production system (if any)	...
Test system (if any)	...
GitHub repository	https://github.com/amosproj/amos-ss2021-neural-network-enablement
GitHub kanban board (project)	https://github.com/amosproj/amos-ss2021-neural-network-enablement/projects/2
Team T-shirt (white)	https://www.shirtinator.de/loadBasket/G2MEDOgLk4p
Team T-shirt (black)	https://www.shirtinator.de/loadBasket/aVPWvh3Dwht
Additional materials	...

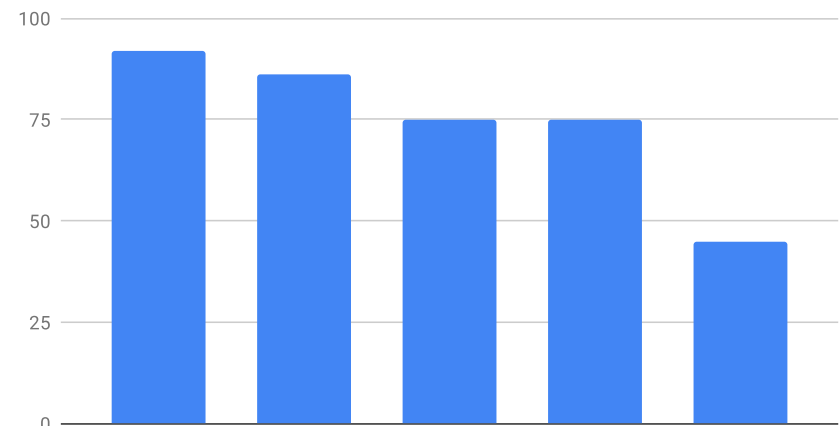
Last Name	First Name	GitHub User Name	Email Address	Device
Ke	Yilin	yilinke	yilinke1995@gmail.com	
Winklmann	Philipp	PhilAce3000	philipp.winklmann@jct.de	
Chen	Xiangxiang	cynthiachen28	roxettekc@hotmail.com	
An	Qi	Emma-An94	787434822@qq.com	
Then	Maximilian	TheSayonara	max.then@yahoo.de	
Meier	Wolfgang	womeier	wolfgang.meier@fau.de	
Susmitha	Rachamreddy	ce52supi	susmi4356@gmail.com	

Goals	Achieve our defined project mission
Meeting norms	Be there, if you cant come update your stuff. Be on time. Come prepared.
Working norms	Think about group work. Be prepared for presentation/report on wednesday. Finish work on Tuesday.
Coordination norms	Be organized. Aks for help immediately if you are stuck (other teams, Scrum Master).
	Put ToDo-list on Teams.
Communication norms	Answer messages within 24 hours.
	PO: Communicate regularly and clearly.
Consideration norms	We discuss disagreement openly
	We vote for a final resolution
Cont. improvement norms	
Rewards	Congratulate person fixing a bug
	Buying celebration cards and get ice cream
Sanctions	Being 5 minutes late = 1€ in piggy bank
Name	Netella
Signed by	Everybody :)

#	Meeting Day	Comment	Coach	Product Owner	Software Developer	Scrum Master	Release Manager
1	2021-04-14		Yes	Maximilian	Everyone else	N/A	N/A
2	2021-04-21		Yes	Maximilian	Everyone else	Philipp	N/A
3	2021-04-28		Yes	Maximilian	Everyone else	Philipp	Wolfgang Meier
4	2021-05-05			Maximilian	Everyone else	Philipp	Xiangxiang Chen
5	2021-05-12		Yes	Maximilian	Everyone else	Philipp	Yilin Ke
6	2021-05-19			Maximilian	Everyone else	Philipp	Susmitha Rachamreddy
7	2021-05-26	Mid-term due	Yes	Maximilian	Everyone else	Philipp	Wolfgang Meier
8	2021-06-02			Philipp	Everyone else	Maximilian	Qi An
9	2021-06-09			Philipp	Everyone else	Maximilian	Rajkumar Kolan
10	2021-06-16		Yes	Philipp	Everyone else	Maximilian	Susmitha Rachamreddy
11	2021-06-23			Philipp	Everyone else	Maximilian	Xiangxiang Chen
12	2021-06-30			Philipp	Everyone else	Philipp	Yilin Ke
13	2021-07-07		Yes	Philipp	Everyone else	Maximilian	Emma
14	2021-07-14	Demo day!		Philipp	Everyone else	Maximilian	Xiangxiang Chen
15	2021-07-21	Retrospective		Philipp	Everyone else	Maximilian	tba

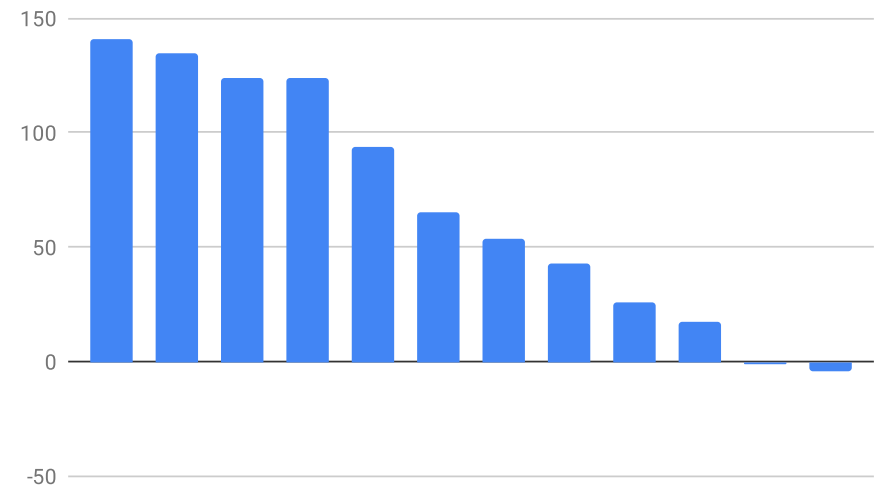
Product Vision	Project Mission
<p>The client's vision is to operate a web-based service that allows black and white photos and videos to be uploaded and viewed and downloaded in color. It also aims to improve the quality of the photo/video. The service is to be enabled by pre-trained neural networks and run on Huawei's own hardware.</p>	<p>The goal of the project is to implement a first version of the web server on the Altas 200 DK hardware. This is to receive photos and videos and feed them to the neural network provided for coloring. Afterwards the result shall be displayed. If time permits, a super-resolution network is to be added to the pipeline.</p>

Term	Definition
tba	to be announced
NN	Neural Net
Backend	Server-part of the webservice: handles the images sent from the frontend, applies the colorization process (app.py)
Frontend	Client-part of the webservice: the user interface (everything in Webservice/static/ and Webservice/templates/)
Host (as defined in the Atlas 200DK documentation)	Host side: The part on the board, where opencv or numpy operations happen
Device (as defined in the Atlas 200DK documentation)	Device side: The part on the board that is responsible for the NN computing, i.e. the acl-context)

[illegible]

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn-Down
2	Basic frontend				7		9	141
			First steps for webservice					
			#3 Create Webservice	3		3		
			#6 Webservice: Upload Picture	2		3		
			#8 Webservice: Present uploaded pictures	2		3		
3	Advanced frontend and first work for backend				6		6	135
			Improvement webservice					
			#5 Webservice: Setup and run scripts	3		3		
			#7 Webservice: Delete picture	3		3		
4	First steps backend				9		11	124
			Basic backend functions					
			#14 Pipeline: Load and store pictures/videos	3		3		
			#22 Pipeline: Connect Webservice to pipeline	3		5		
			#15 Pipeline: Splitt Video into pictures	3		3		
5	Advancements in frontend							
			Frontend		7		0	124
			#9 Webservice: Colorization	5				
			#10 Webservice: Present the results	2				
6	Enable testing							
			Backend		29		30	94
			#23 Create helper functions from utils.cpp in Python	3		2		
			#29 Testing: Continuous Integration	3		5		
			#28 Testing: Functional Test	3		3		
			#30 Merge of pipeline tasks	5		5		
7	Finish integration and test pipeline							
			Backend		27		29	65
			Finish Preprocessing, Postprocessing and the Colorization	13		13		
			Merge Pipeline Tasks	5		5		
8	Add video feature							
			Backend		13		11	54
			Correction of the colouring output	5				
			Refactoring: Update flask library	2		2		
			Documentation	(2+2+5) = 9		9		
9	New: high resolution feature							
			Backend		16		11	43
			Bug fix: Colouring output	5				
			Frontend Bug: empty gallery & present results	3+3		3+3		
			Merge Video	5		5		
10	Finalize Colouring							

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#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down

Sprint	Status	Source	Impediment	Resolution
1	Resolved	github	missing push rights	contact Prof. Riehle
2	Resolved	hardware	distribution of hardware needs a loancontract	Distribution via pick up at Prof. Riehle's chair or shipping via mail
2	Resolved	project team	answers are not there or too late	answer to questions within 24 hours
3	Resolved	project team	there is no communication after a method's interface which is important for the whole team is changed	
3	Resolved	Atlas 200 DK	SD card is not detected	
3	Resolved	acl toolkit	cannot be imported	
4	Resolved	source code	every SD needs to test his/her code before push	
4	Resolved	9th team member	He is not in any of the meetings and not doing any work	
5	Resolved	Other team members	Overwriting other code	
5	Resolved	Other team members	Refactor a change in a variable everywhere in the code	
5	Resolved	Github	Create own branch for every SD	
8	Resolved	Integration Test	Runs on Wolfgangs local device and he cannot switch it of	
9	Resolved	Team member	More programming in teams for productivity	
10	In-work	Team member	Communication: Faster reaction and answering to messages and questions / asking for help early	
11	In-work	Team member	Get involved in the meetings - speak up/say our opinion	
11	Resolved	Team member	More precise titles for the Git commits	
12	In-work	Team member	If you cannot join a meeting, please tell the others	

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Type	Link / reference
Build / Deploy Documentation	
User Documentation	
Technical documentation	https://amosproj.github.io/amos-ss2021-neural-network-enablement/

I	Context	Name	Version	License	Comment		
1	Webservice frontend	tailwindcss	2.1.2	MIT			
2	Webservice frontend	dropzonejs	5.9.2	MIT			
3	Webservice frontend	jquery	3.4.0	MIT			
4	Webservice frontend	toastify-js	1.11.0	MIT			
5	Webservice frontend	fontawesome-free icon	5.0.13	CC BY 4.0			
6	Webservice frontend	heroicons icon	1.0.0	MIT			
7	Webservice backend, Pipeline	Python	3.7.5	GPL	GPL ok, we don't redistribute it		
8	Webservice backend	flask	2.0.1	BSD-3-clause (BSD-new)			
9	Webservice backend, Pipeline	opencv	4.5.2.54	MIT			
10	Pipeline	moviepy	1.0.3	MIT			
11	Pipeline	ffmpeg	4.1.3	LGPL-2.1-or-later, GPL-2.0-or-later	compiled with the --enable-gpl option, ok, we don't redistribute it		
12	Pipeline	atlas_utils, acl_model, acl_resource	2020-06-06	Apache 2.0	Taken from https://gitlab.schihei.de/schihei/sample-bodypose , the complete repository is licensed under Apache 2.0, changes: use relative imports		
13	Testing	pytest	6.2.4	MIT			
	Testing	pytest-cov	2.12.0	MIT			
	Testing	flake8	3.9.2	MIT			
	Testing / Documentatino	mock	4.0.3	BSD			
	Documentation	sphinx	4.0.2	BSD			
14	Documentation	sphinx-rtd-theme	0.5.2	MIT			
15	OS	Ubuntu	18.04	GPL	GPL ok, we don't redistribute it		
	Developer board	Atlas 200 DK	1.73.0.0				
16							
17	Toolkit package	Ascend Toolkit	20.0.RC1-arm64-linux_gcc7.3.0	GPL	GPL ok, we don't redistribute it		
18	Toolkit package	Ascend Toolkit	20.0.RC1-x86_64-linux_gcc7.3.0	GPL	GPL ok, we don't redistribute it		
19	Toolchain platform	Mind Studio	2.3.3				
20	Suggested colorization code	Sample colorization	2020-11	Apache 2.0			

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