

Computer Vision zur bildbasierten Geodatenerfassung

Projekt: Reconstruction of Landmarks

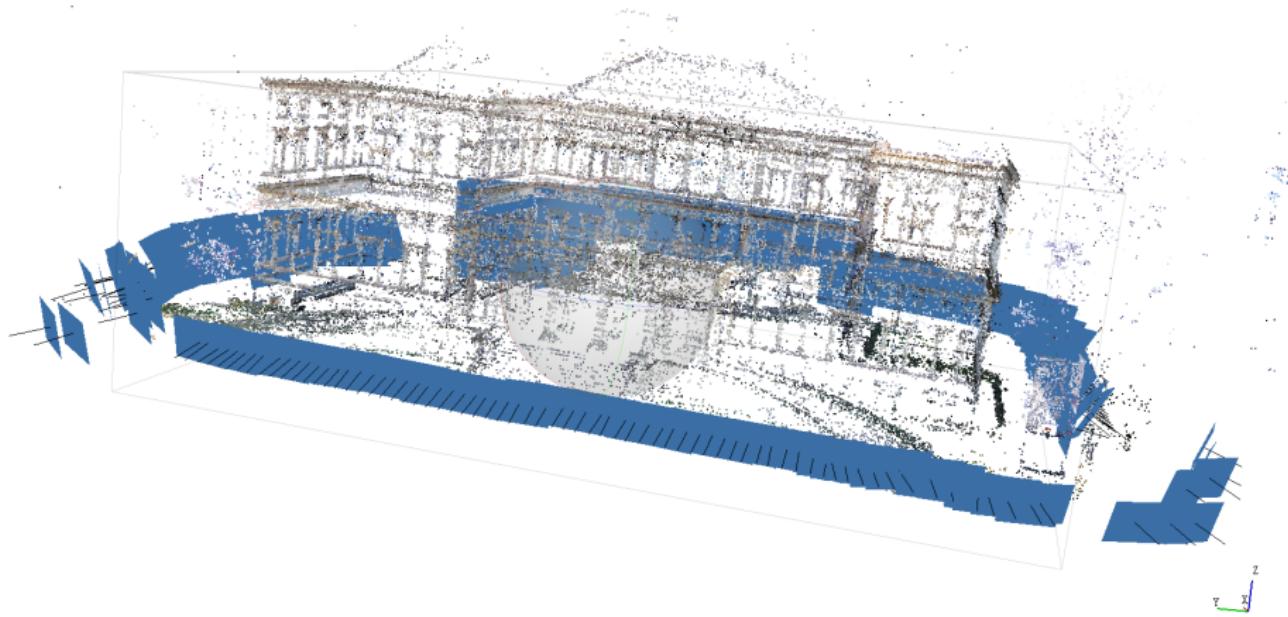
Phase 2: Erfassung und Auswertung der Bilder

Yihan Tao
Hsin-Feng Ho
Jixin Liu

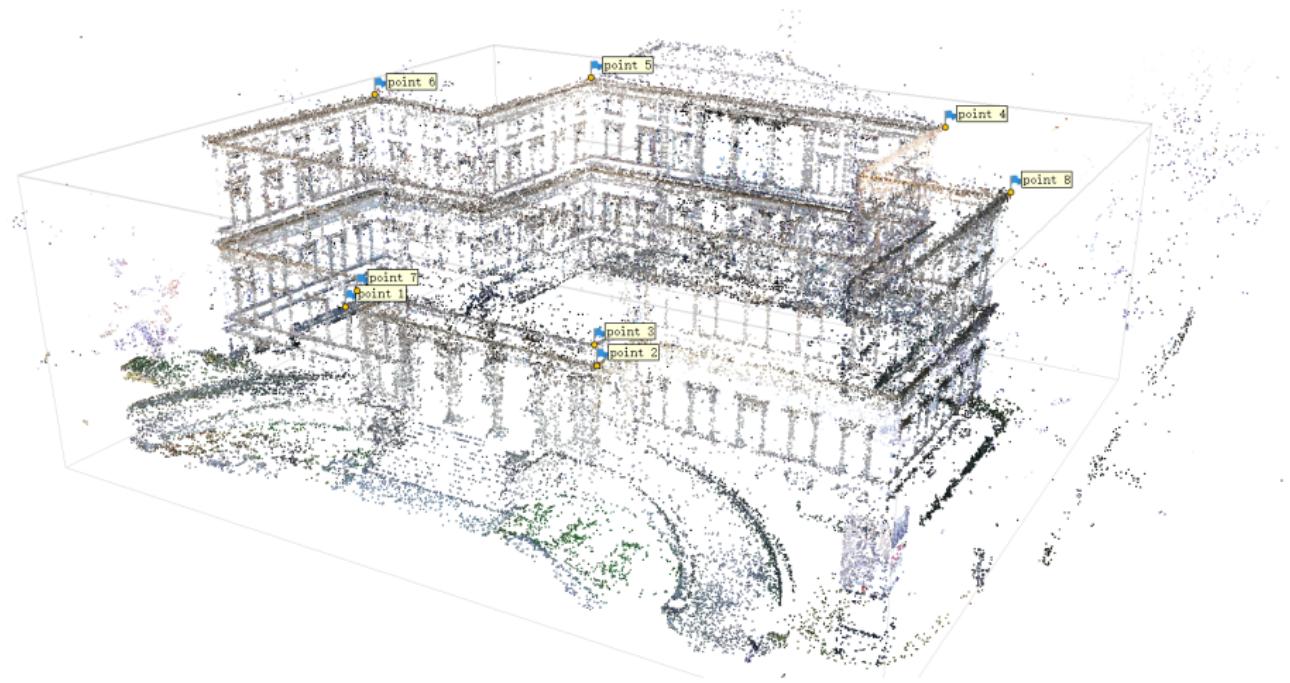
Stuttgart, November 2021



Kameraposition



Georeferencing



Georeferencing

Reference									
Cameras	East est (m)	North est (m)	Alt. est (m)	Accuracy (m)	Error (m)	Omega est (°)	Phi est (°)	Kappa est (°)	
<input type="checkbox"/> NO_00...	513581.389142	5402572.7944...	254.856812			107.046	76.590	-17.023	
<input type="checkbox"/> NO_00...	513581.383923	5402572.6820...	254.877136			123.569	79.918	-33.635	
<input type="checkbox"/> NO_00...	513581.337745	5402571.4937...	254.903354			112.999	74.146	-21.485	
<input type="checkbox"/> NO_00...	513578.976930	5402569.4413...	255.413728			124.624	76.935	-32.919	
<input type="checkbox"/> NO_00...	513578.154917	5402567.8371...	255.387520			115.463	76.084	-24.119	
<input type="checkbox"/> NO_00...	513577.454237	5402566.3161...	255.410626			114.191	74.565	-23.481	
<input type="checkbox"/> NO_00...	513577.406977	5402578.3669...	255.109564			-169.745	81.258	-102.062	
<input type="checkbox"/> NO_00...	513576.728696	5402564.6769...	255.388578			112.010	74.032	-20.702	
<input type="checkbox"/> NO_00...	513575.974487	5402562.6282...	255.369779			104.687	69.297	-13.088	
<input type="checkbox"/> NO_00...	513575.322287	5402577.8574...	255.262710			-130.239	80.382	-138.483	
<input type="checkbox"/> NO_00...	513574.989090	5402561.7397...	255.425038			116.546	72.322	-24.811	
<input type="checkbox"/> NO_00...	513573.452308	5402578.7335...	255.281014			-173.726	83.438	-95.788	
<input type="checkbox"/> NO_00...	513573.238196	5402587.0985...	255.045487			-134.208	74.969	-137.337	
<input type="checkbox"/> NO_00...	513573.100600	5402587.1113...	255.026100			100.552	79.160	-163.100	
Markers	East est (m)	North est (m)	Alt. est (m)	Accuracy (m)	Error (m)	Projections	Error (pix)		
<input checked="" type="checkbox"/> point 1	513511.569930	5402595.705931	259.523443	0.200000	0.321239	159	0.724		
<input checked="" type="checkbox"/> point 2	513503.408211	5402577.775292	259.553184	0.200000	0.404252	176	0.375		
<input checked="" type="checkbox"/> point 3	513504.172590	5402578.076974	260.627231	0.200000	0.307755	153	0.387		
<input checked="" type="checkbox"/> point 5	513553.296652	5402584.260347	268.215970	0.200000	0.595292	149	0.534		
<input checked="" type="checkbox"/> point 4	513539.002955	5402553.538295	268.237501	0.200000	0.350970	144	0.750		
<input checked="" type="checkbox"/> point 8	513518.830700	5402551.300491	268.016285	0.200000	0.244326	178	0.489		
<input checked="" type="checkbox"/> point 6	513541.674829	5402601.287075	267.945820	0.200000	0.315695	140	0.454		
<input checked="" type="checkbox"/> point 7	513511.854070	5402594.945610	260.600566	0.200000	0.426596	47	1.364		
Total Error									
Control poi...							0.384094	0.600	
Check points									

Dense Cloud



Scale



Figure: 1.14m in Realität



Figure: 1.01m in Realität

Mesh+Texture

