Propositions accompanying the dissertation

Anatomical Shape and Motion Reconstruction from Sparse Image Data

Nóra Baka, 2012

1. Integrating prior information on appearance in edge based reconstruction increases robustness and convergence. (this thesis)
2. Edge based shape reconstruction from low quality image sequences outperforms single time-frame reconstructions. (this thesis)
3. Biased linear regression methods are well suited for shape and motion prediction in the medical setting. (this thesis)
4. Coronary artery motion can be well estimated from the motion of the nearby cardiac surface. (this thesis)
5. Coronary artery motion models provide flexibility for 2D+t/3D coronary registration, while restricting the motion to plausible limits. (this thesis)
6. Thorough planning in research is essential, just as much as the flexibility of changing the initial plans.
7. Over-regulation by an excessive number of penalty conditions hinders reaching the optimum in both real life and computer optimization problems.
8. The immediate popularity of a novel method is not only dependent on its performance, but on the ease of implementation, and its open source availability.
9. The pressure to publish in academia dilutes the quality of publications.
10. Research in a team environment is more effective, edifying, and enjoyable than working on one's own.
11. Perfection in design is attained not when there is no longer anything to add, but when there is no longer anything to take away. *(Antoine de Saint Exupery)*