

Digital Images and Visual Perception



Welcome to the first lecture series. We will cover the underlying basics of digital images, emphasizing the importance for image processing and image analysis. We will dwell on the following questions: What are the characteristics of a digital image? How is a digital image formed? How is it displayed on the screen and which parameters are important for its display and the analysis afterwards? And finally how is our visual perception, our inbuilt analysis mechanism- influenced by the way it is displayed? Moreover we introduce a software package called Fiji/ImageJ which we will use throughout the course for the examples as well as for the exercises. Don't be afraid this software is available for the majority of operating systems; it can be installed without any major knowledge in computer science, and you will love using it quickly. Even more important, it is an open source software and freeware so it can be installed without any costs involved. So let's get started and dive into the world of image analysis.

Notes

Summary



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