

## **Povzetek**

V delu se bomo najprej seznanili z osnovnimi lastnostmi bitnih slik. Potem se bomo osredotočili na interpolacijo in podrobneje spoznali tri metode: interpolacijo najbližjega sosedu, bilinearno interpolacijo in bikubično interpolacijo. Sledili bosta analiza in primerjava omenjenih algoritmov. Za konec si bomo pogledali še uporabo interpolacije pri stiskanju slik in navedli nekatere druge metode, ki se pogosteje pojavljajo v praksi.

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**Ključne besede:** obdelava slik, interpolacija, bikubična interpolacija, stiskanje slik.

## **Abstract**

In this work, we will first learn about the basic properties of bitmaps. Further on, we will focus on the interpolation and study three methods: the nearest neighbour interpolation, bilinear interpolation and bicubic interpolation. Analysis and comparison of algorithms will follow. In conclusion, we will examine how interpolation in image compression is used and we will add some other methods that are more common in practice.

## **Keywords:**

image processing, interpolation, bicubic interpolation, image compression.

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