



< Previous

 



















Next >

2. Introduction

 Bookmark this page



Explore

We have seen that we can use linear approximation to represent a function like $z = f(x, y)$ near a given point by its tangent plane. In this lecture, we will explore a way to reframe the approximation using the language of matrices. By repackaging this approximation as a matrix, we can obtain further insight about the behavior of the function near that point.

Approximating a function with a linear function is called "Linearization". You will also see applications of linearization including:

- 1. Controlling a robot arm.
- 2. Accurately serving a volleyball.
- 3. Sensitivity analysis.

2. Introduction

Topic: Unit 4: Matrices and Linearization / 2. Introduction

Hide Discussion

Add a Post

Show all posts ▾by recent activity ▾

There are no posts in this topic yet.

✕

< Previous

Next >



[edX for Business](#)

[Open edX](#)

[Careers](#)

[News](#)

Legal

[Terms of Service & Honor Code](#)

[Privacy Policy](#)

[Accessibility Policy](#)

[Trademark Policy](#)

[Sitemap](#)

Connect

[Blog](#)

[Contact Us](#)

[Help Center](#)

[Media Kit](#)

[Donate](#)



© 2021 edX Inc. All rights reserved.

深圳市恒宇博科技有限公司 [粤ICP备17044299号-2](#)