

# Exercise

12

TUM Department of Informatics

<b>Supervised by</b>	Prof. Dr. Stephan Günnemann Informatics 3 - Professorship of Data Mining and Analytics
<b>Submitted by</b>	Marcel Bruckner (03674122) Julian Hohenadel (03673879) Kevin Bein (03707775)
<b>Submission date</b>	Munich, January 21, 2020

## **Dimensionality Reduction & Clustering**

**Problem 1:**

**Problem 2:**

**Problem 3:**

**Problem 4:**

**Problem 5:**

# Appendix

We confirm that the submitted solution is original work and was written by us without further assistance.  
Appropriate credit has been given where reference has been made to the work of others.

---

Munich, January 21, 2020, Signature Marcel Bruckner (03674122)

---

Munich, January 21, 2020, Signature Julian Hohenadel (03673879)

---

Munich, January 21, 2020, Signature Kevin Bein (03707775)