Overview (updated**) of research history

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1 Introduction

This document contains the short description of my research that was done in the period since I started my master studies until now (2022). The research sketch is split into number of sections according to the topics of my research.

2 Covering problems

In the context of covering problems we have published the following papers: [6–10, 13, 20, 25, 30, 86–90, 93, 101, 165, 196].

3 Facilities location

Numerous results were produced for facilities location problems: [11–14, 16, 24, 42, 45, 57, 91, 92, 94, 97, 134].

4 Ad-hoc and sensor networking

Regarding the ad-hoc and sensor networking we have obtained the following results: [4, 5, 21, 23, 28, 29, 31, 33, 36, 38–41, 43, 44, 46–49, 51, 54, 56, 60–62, 70, 71, 73, 76, 77, 98, 103, 104, 107–110, 112, 113, 116–123, 127, 131, 135, 137, 140, 141, 146, 147, 150, 153, 157, 161–163, 168, 169, 180, 181, 184, 205].

5 Spanners

Several papers were published in the area of spanners for networks: [52, 58, 65, 129, 133, 136, 175, 208].

6 Geometric algorithms

We have investigated various geometric problems and provided efficient solutions for them. These include: [17–19, 22, 26, 27, 68, 83, 95, 96, 100, 105, 106, 139, 143, 155].

7 Algorithms and optimization

Number of results regarding the general topic of algorithms and optimization: [15, 32, 50, 63, 66, 82, 85, 99, 102, 115, 130, 132, 149, 174, 182, 185, 198].

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8 Scheduling in switches and network processors

Additional results for scheduling in switches and network process can be found in: [53, 55, 59, 64, 79, 124–126, 128, 138, 152].

9 Vehicular ad-hoc networks

Different approaches for solving the problems in VANETs are shown in: [67, 72, 74, 75, 78, 80, 84, 142, 145, 148, 151, 154, 159, 164, 191].

10 Anomaly detection and privacy

Results can be found in [166, 167, 170–172, 176, 183, 186, 199, 206].

11 Wireless networking

The following papers contain some research related to general wireless networking problems: [34, 35, 69, 81, 111, 114, 144, 156, 158, 160, 194].

12 Satellite networking

Several results are listed here: [173, 177–179, 188, 200, 201, 204]

13 Machine learning

Some research appeared in: [187, 189, 192, 193, 197].

14 Swarms

May results published in [190, 195, 202, 203, 207]

15 Edited proceedings

The following proceedings were prepared by us: [1–3].

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