

| MASTER'S THESES |                                |   |                         |                            |
|-----------------|--------------------------------|---|-------------------------|----------------------------|
| NO.             | SUPERVISOR                     | TITLE OF THE THESIS   | FIELD OF STUDY          | THE NUMBER OF THE STUDENTS |
| 1.              | Prof dr hab.inż. Hanna Bogucka | <i>URLLC links management in 5G networks</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 2.              | Prof dr hab.inż. Hanna Bogucka | <i>Energy-efficiency optimization in 5G network segment</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 3.              | Prof dr hab.inż. Hanna Bogucka | <i>Comuping services uberization model in a fog network</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 4.              | Prof dr hab.inż. Hanna Bogucka | <i>Machine learning for definition of the radio equipment profile in the network</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 5.              | Prof dr hab.inż. Hanna Bogucka | <i>Energy-efficiency optimization in 5G network segment</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 6.              | Dr inż Krzysztof Cichoń        | <i>Path loss modeling with deep neural networks</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 7.              | Dr inż Krzysztof Cichoń        | <i>Intelligent application for disabled people navigation</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 8.              | Dr inż Filip Idzikowski        | <i>Energy consumption models of the Internet of Things (IoT) devices</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 9.              | Dr inż Filip Idzikowski        | <i>Failure protection of green backbone networks</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 10.             | Dr hab.inż. Adrian Kliks       | <i>Radio resource management in autonomous base stations</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 11.             | Dr hab.inż. Adrian Kliks       | <i>Radio resource management assignment among operators based on CBRS</i>   | EiT/ICT/Teleinformatyka | 1                          |
| 12.             | Dr hab.inż. Adrian Kliks       | <i>Application of AI tools for radio resource assignment for drone small cells</i>  | EiT/ICT/Teleinformatyka | 1                          |
| 13.             | Dr hab.inż. Adrian Kliks       | <i>Implementation of the system for realization of typical city-games that utilizes mobile devices and web applications</i> | EiT/ICT/Teleinformatyka | 1/2                        |

|     |                             |  |                         |     |
|-----|-----------------------------|--|-------------------------|-----|
| 14. | Dr hab.inż. Adrian Kliks    | <i>Traffic Steering application for Open RAN base stations</i>   | EiT/ICT/Teleinformatyka | 1   |
| 15. | Dr hab.inż. Maciej Krasicki | <i>Shuttle on demand – ICT solutions for public transport problems in rural areas</i>  | EiT/ICT                 | 1   |
| 16. | Dr hab.inż. Maciej Krasicki | <i>A WLAN protocol analyser based on USRP devices</i>  | EiT/ICT                 | 1   |
| 17. | Dr hab.inż. Maciej Krasicki | <i>Simulator of the turbo-decoder-an education app</i>   | EiT/ICT/Teleinformatyka | 1   |
| 18. | Dr hab.inż. Rafał Krenz     | <i>PUT SatNOGS network node</i>  | EiT/ICT/Teleinformatyka | 1/2 |
| 19. | Dr hab.inż. Rafał Krenz     | <i>Modelling of a communication system for CubeSat satellites</i>  | EiT/ICT/Teleinformatyka | 1   |
| 20. | Dr inż Paweł Kryszkiewicz   | <i>Influence of frontend nonlinearities on properties of signals in a Massive MIMO system</i>  | EiT/ICT/Teleinformatyka | 1   |
| 21. | Dr inż Paweł Kryszkiewicz   | <i>Increase of multiantenna 5G/6G transmitter by efficiency by transmitted signal shaping</i>  | EiT/ICT/Teleinformatyka | 1   |
| 22. | Dr inż Paweł Kryszkiewicz   | <i>Passive radar detecting movement in rooms-implementation using Software Defined Radio technology</i>  | EiT/ICT/Teleinformatyka | 1   |
| 23. | Dr inż Marcin Rodziewicz    | <i>Indoor Localization with Wi-Fi Round-Trip-Time</i>  | EiT/ICT/Teleinformatyka | 1   |
| 24. | Dr inż Marcin Rodziewicz    | <i>Investigation of the influence of vehicle heterogeneity on the behavior of platoon of vehicles moving with the use of V2V communication</i> | EiT/ICT/Teleinformatyka | 1   |
| 25. | Dr inż hab Piotr Remlein    | <i>Analysis and detection of anomalies in 5G networks</i>  | EiT/ICT/Teleinformatyka | 1   |

|     |                               |  |                         |   |
|-----|-------------------------------|--|-------------------------|---|
| 26. | Dr inż hab Piotr Remlein      | Filtrowanie ruchu w sieciach bezprzewodowych<br><i>Filtering of traffic in wireless networks</i> | EiT/ICT/Teleinformatyka | 1 |
| 27. | Dr inż hab Piotr Remlein      | <i>Filtering of traffic in wireless sensor networks</i>  | EiT/ICT/Teleinformatyka | 1 |
| 28. | Dr inż hab Piotr Remlein      | <i>Developing a profile of legal traffic in wireless networks</i>                                | EiT/ICT/Teleinformatyka | 1 |
| 29. | Dr inż Paweł Sroka            | <i>Basic services in V2X communications</i>  | EiT/ICT                 | 1 |
| 30. | Dr inż Paweł Sroka            | <i>Analysis of dynamic congestion control (DCC) for V2X communications</i>                       | EiT/ICT                 | 1 |
| 31. | Dr inż Michał Sybis           | <i>Implementation of efficient fixed point LDPC / PC code</i>                                    | EiT/ICT/Teleinformatyka | 1 |
| 32. | Dr inż Michał Sybis           | <i>Comparison of ultra low complexity decoding algorithms for IoT transmission</i>               | EiT/ICT/Teleinformatyka | 1 |
| 33. | Prof dr hab.inż. Jerzy Tyszer | <i>Masking of unknown states for built-in self-test applications</i>                             | EiT/Teleinformatyka     | 1 |
| 34. | Prof dr hab.inż. Jerzy Tyszer | <i>Test coverage with test time constraints</i>  | EiT/Teleinformatyka     | 1 |
| 35. | Prof dr hab.inż. Jerzy Tyszer | A hybrid test generation scheme for logic built-in-self-test                                     | EiT/Teleinformatyka     | 1 |
| 36. | Prof dr hab.inż. Jerzy Tyszer | <i>Algorithmic testing of error correcting code logic in embedded memories</i>                   | EiT/Teleinformatyka     | 1 |

|     |  |   |                         |   |
|-----|--|---|-------------------------|---|
| 37. | Prof dr hab.inż. Krzysztof<br>Wesołowski | <i>OFDM transmission with minimized peak-to-average power ratio using compression and filtration and minimizing interference among subcarriers in the receiver using a neural network</i> | EiT/ICT                 | 1 |
| 38. | Prof dr hab.inż. Krzysztof<br>Wesołowski | <i>LORA modem transmitter and receiver for application in Internet of Things</i>  | EiT/ICT                 | 1 |
| 39. | Prof dr hab.inż. Krzysztof<br>Wesołowski | <i>Comparison of standards for transmission in IoT systems</i>  | EiT/ICT/Teleinformatyka | 1 |
| 40. | Prof dr hab.inż. Krzysztof<br>Wesołowski | <i>Architecture of V2X communication system in 5G</i>   | EiT/ICT/Teleinformatyka | 1 |