

CURRICULUM VITAE

Dr. Tech., Assistant Professor, Title of Docent, Konstantin Mikhaylov

1. Full name and date

- Surname: Mikhaylov
- First name: Konstantin
- Citizenship/Nationality: Finland/USSR
- ORCID: [0000-0002-5518-6629](https://orcid.org/0000-0002-5518-6629); ResearcherID: [T-6800-2019](https://orcid.org/T-6800-2019)
- Google Scholar: <https://scholar.google.com/citations?user=D61UbdcAAAAJ>
- Gender: male
- Date of CV: 24 April 2022

2. Degrees and titles awarded

- **Title of Docent (Dosentti, 01.05.2021)** – in the field of *Convergent IoT Communications for Vertical Systems*, University of Oulu, Oulu, Finland.
- **Doctor of Science in Technology (03.05.2018)**, University of Oulu, Oulu, Finland.
- **Master of Science in Engineering (03.06.2008)** and **Bachelor of Science in Engineering (21.06.2006)**, Saint-Petersburg State Polytechnical University, Saint-Petersburg, Russian Federation.

3. Other education and expertise (recent three years)

- Proof of Competency for UAV remote pilot in category Open A1/A3, Traficom, September 2021.
- The University of Oulu, “University pedagogy”, “Doctoral supervision training for supervisors” and various pedagogy and digital pedagogy courses, 2020-2022.
- Enspire Science Academy: “ERC Basics” and “ERC Advanced” (Fall 2021); EU Cost Innovation Grant (CIG), “How to prepare a Business Plan”, (May-June 2020).

4. Language skills

- Russian: native
- English: fluent
- Finnish: intermediate (YKI: B1)
- German: intermediate

5. Current employment(s)

- since **1.11.2019** – **Assistant Professor (Tenure track) for Convergent IoT Communications for Vertical Systems** at Centre for Wireless Communications Network Systems group (CWC-NS), Faculty of Information Technology and Electrical Engineering (ITEE), University of Oulu, Oulu, Finland
- since **8.9.2016** – **Co-Founder [part time]** at Solmu Technologies OY, Oulu, Finland. The company delivers IoT solutions and provides consultancy for various markets and verticals, with Industry and Smart City the primary focus.

6. Previous work experience

- **7.5.2019-10.11.2019** – **Post-Doctoral Research Fellow (MTC)** with the Faculty of Electrical Engineering and Communication (FEKT), Brno University of Technology, Brno, Czech Republic.
- **1.6.2018-31.10.2019** – **Post-Doctoral Research Fellow** for Internet of Things (IoT) and wireless Machine-Type Communication (MTC) technologies CWC-NS, ITEE, University of Oulu, Oulu, Finland.
- **1.1.2014-30.5.2018** – **Doctoral Student/Researcher** (IoT and wireless MTC technologies), CWC-NS, ITEE, University of Oulu, Oulu, Finland.
- **25.08.2008-31.12.2013** – **Project Engineer/Researcher** (Wireless Sensor Networks (WSN) and IoT) at RFMedia Laboratory (Oulu Southern Institute of the University of Oulu/Centria R&D of Central Ostrobothnia University of Applied Sciences), Ylivieska, Finland.

Adjunct positions and major international research visits (recent 10 years):

- **1.12.2019-22.05.2020** – **Visiting Post-Doctoral Research Fellow (MTC & V2X)** with the **University of Bologna, Italy**. Wireless networking group lead by Prof. Roberto Verdone.
- **26.03.2019-06.05.2019** – **Visiting Researcher (MTC)** with **King’s College London, London, UK**. Prof. Mischa Dohler’s group.
- **15.09.2015-06.12.2015** – **Visiting Researcher** (ultrawideband radio technologies) with **Yokohama National University, Yokohama, Japan**. Prof. Ryuji Kohno’s laboratory.
- **20.01.2013-23.03.2013** – **Visiting Researcher (WSN)** with **Gwangju Institute of Science and Technology, Gwangju, Republic of Korea** (i.e., South Korea). Prof. Kiseon Kim’s laboratory.

7. Career breaks: none

8. Research funding and grants (in gray are listed the already finished projects)

As the principal investigator (PI) or equivalent: total budget of 575 000 EUR, including:

- 1.9.2021-31.08.2024 – Multi-Radio Access Technology Connectivity for Improving Safety of Drones (MRAT-SafeDrone) project, Academy of Finland, *Principal Investigator* (Total budget: 343 748 EUR)
- 1.1.2018-31.12.2019 – Low Power Wide Area Network Evolution (LPWAN-Evolution) project, University of Oulu, *Principal Investigator* (Total budget: 200 000 EUR)

- 1.2.2017-30.9.2017 – Extending IoT signal coverage, Business Finland (HILLA programme), *Principal Investigator* (Total budget: 30 000 EUR)

As a work package (WP) leader or equivalent:

- 1.1.2022-31.12.2024 – Unmanned aerial systems based solutions for real-time management of wildfires (FireMan), Academy of Finland (Total budget: 2 791 925 EUR)
- 1.1.2021-31.12.2023 – Beyond 5G Distributed Ledger Technology Mesh for Industrial Robot Collaboration (Robomesh), Academy of Finland (Total budget: 1 300 000 EUR)
- 1.9.2020-31.8.2023 – A Cognitive Fractal and Secure EDGE based on an unique Open-Safe-Reliable-Low Power Hardware Platform Node (FRACTAL), Horizon 2020 (Total budget: 15 727 138 EUR)
- 1.5.2020-31.10.2021 – Industrial Machine Monitoring Unplugged Network (IMMUNet), COST Innovator Grant IG15104, *CIG Team Member* (Total budget: 84 134 EUR)
- 1.1.2016-31.12.2017 – Wireless Networking Laboratory (WNL), University of Oulu, *WP leader* (Total budget: 200 000 EUR)

Personal research grants: Nokia Foundation (2x5000 EUR), Sähköinsinööriiton Säätiö (2000 EUR)

9. Research outputs

- The total number of publications – 113 (classification of Ministry of Education and Culture of Finland):
 - A1: 32 peer-reviewed research papers in internationally recognized journals (2012-2022)
 - A3: 4 book chapters (2012, 2019-2020)
 - A4: 61 peer-reviewed research papers in high-level international conferences (2010-2022)
- h-index: 25 (Google Scholar), 18 (Scopus)
- Total number of citations: 3395 (Google Scholar), 1849 (Scopus)
- Eight (8) invention disclosures (H2)

10. Research supervision and leadership experience

- PI/Co-PI and WP leader for multiple projects (see section 8. Research funding and grants)
- WG3 (Network Architectures and Protocols; 140+ members) co-chair in COST CA20120 INTERACT
- Supervisor/co-supervisor/examiner of theses: 9 M.Sc. and 2 B.Sc. students
- Supervisor: 3 PhD students; follow-up group chair/member: 5 PhD students.

11. Teaching merits

- Towards 6G course materials preparation (lead by Prof. Sasu Tarkoma, Univ. Helsinki, 2022)
- Lecturer in “Machine-type wireless communications & applications” course (Univ. Oulu, 2022)
- Wireless Communication Engineering Internation MSc program admissions evaluator (2022,2021)
- 5G-focused lectures (series on IoT) for Industry as a part of continuous learning (2021)
- Assistant Teacher to Prof. Roberto Verdone at Ubiquitous Summer School (2019)
- Contributed to “Hands-on IoT” B. Sc. course (5/8 cr) planning and preparation (2016)
- *Note: CWC-NS is a research-oriented unit with limited teaching allocations & needs*

12. Awards, prizes, and honours

- Senior Member of IEEE
- among the World's Top 2% Scientists by bibliography metrics (years 2020 and 2019) by Elsevier BV: DOI 10.17632/btchxktzyw.3
- most publishing researcher (w.r.t. JUFO points) of CWC-NS unit, Univ. Oulu in 2020, 2018 & 2017
- best demo award at SmartCom'2016 & best paper award at IEEE CogInfoCom'2014.

13. Other key academic merits

- Guest editor of the special issues (Green IoT & Smart City IoT) of Sensor J. (2018 & 2020-2022)
- Reviewer (referee) in IEEE, Elsevier, Springer, Wiley and MDPI journals, e.g.: IEEE Wireless Commun. Let., IEEE Commun. Mag., IEEE Commun. Let., IEEE IoT J., IEEE Sensors, J. Systems & Software, IEEE Access, IEEE Trans. Comput., IEEE Trans. Netw. Service Manag., IEEE Trans. Commun.
- Track co-chair for vertical applications and IoT for EuCNC 2022, general co-chair of WearIoT in 2019-2021; publicity chair of Sustainable networking through Machine Learning and Internet of things (SMILING) workshop (in conjunction with IEEE Infocom 2019)

14. Scientific and societal impact

- Project evaluator/expert for Latvian Council of Science, Latvian Central Finance and Contracting Agency, and Kuwait Foundation for the Advancement of Sciences
- Member of ETSI, AIOT and COST IRACON. MC representative for Finland in COST INTERACT.