

## Projects B

Name	Poster Title	PI Co-PI	Project Title	Project Number
Jianan Bai	Multi-Agent Policy Optimization for Pilot Selection in Delay-Constrained Grant-Free Multiple Access	Fredrik Tufvesson Erik G. Larsson	Ultra-reliable wireless for 6G applications	B01
Guoda Tian	Sensing and Classification Using Massive MIMO: A Tensor Decomposition-Based Approach	Fredrik Tufvesson Erik G. Larsson	Ultra-reliable wireless for 6G applications	B01
Aleksey Fedorov	Implementation of spatially consistent channel models for real-time full stack C-ITS V2X simulations	Fredrik Tufvesson Erik G. Larsson	Ultra-reliable wireless for 6G applications	B01
Sara Gunnarsson	mmWave Massive MIMO in Real Propagation Environment: performance evaluation using LuMaMi28GHz	Fredrik Tufvesson Erik G. Larsson	Ultra-reliable wireless for 6G applications	B01
Deijany Rodríguez Linares	Mitigation of analog-circuit imperfections utilizing machine learning techniques	Liang Liu Håkan Johansson Yousra Alkabani	Baseband Processing for Beyond 5G Wireless	B02
Jesús Rodríguez Sánchez	Positioning for Distributed Large Intelligent Surfaces using Neural Network with Probabilistic Layer	Liang Liu Håkan Johansson Yousra Alkabani	Baseband Processing for Beyond 5G Wireless	B02
Ali Nada	High-level design methodologies using distributed many-core processor architectures for beyond 5G algorithms	Liang Liu Håkan Johansson Yousra Alkabani	Baseband Processing for Beyond 5G Wireless	B02
Rikard Gannedahl	6G Radio Transceiver Design - Challenges and Opportunities	Atila Alvandpour Henrik Sjöland	Energy-efficient ICs for 6G and radars transceivers	B03
Javad Bagheri Asli	Energy-Efficient RF Front-End and Data Converters for 5G/6G Applications	Atila Alvandpour Henrik Sjöland	Energy-efficient ICs for 6G and radars transceivers	B03
Jing Yang	Some Possibilities for 5G Confidentiality and Integrity Algorithms	Thomas Johansson Simin Nadjm-Tehrani	5G Security	B04
Felipe Valle	Emergency Vehicle Light Preemption in Cooperative Automated Driving	Alexey Vinel Maria Kihl	6G wireless, sub-project: vehicular communications	B05
Zahra Chamideh	A Safe and Robust Autonomous Intersection Management System	Alexey Vinel Maria Kihl	6G wireless, sub-project: vehicular communications	B05
Max Nyberg Carlsson	Data-Driven Robust Control over the Cloud	Anton Cervin Zebo Peng	Robust and Secure Control over the Cloud	B06
Rouhollah Mahfouzi	Butterfly Attack: Adversarial Manipulation of Temporal Properties of Cyber-Physical Systems	Anton Cervin Zebo Peng	Robust and Secure Control over the Cloud	B06
Yungang Pan	Design of Cloud-Based Cyber-Physical Systems	Anton Cervin Zebo Peng	Robust and Secure Control over the Cloud	B06
Sergio Rico	Fostering researchers-practitioners knowledge exchange with interactive approaches	Nauman bin Ali Emelie Engström	Quality assurance in continuous software engineering	B07
Vi Tran	Towards supporting test artifact quality assurance in software testing	Nauman bin Ali Emelie Engström	Quality assurance in continuous software engineering	B07
Muhammad Laiq	Supporting practitioners with software analytics	Nauman bin Ali Emelie Engström	Quality assurance in continuous software engineering	B07
Umar Iftikhar	Improving modern code reviews using code quality measurements	Nauman bin Ali Emelie Engström	Quality assurance in continuous software engineering	B07
Idriss Riouak	A Precise Framework for Source-Level Control-Flow Analysis	Görel Hedin Adrian Pop	Cloud Tooling for Large-Scale Cyber-Physical System Model-Based Development	B08
Anton Risberg Alaküla	Declarative IDE tooling in the cloud	Görel Hedin Adrian Pop	Cloud Tooling for Large-Scale Cyber-Physical System Model-Based Development	B08
Mariusz Wzorek, Piotr Rudol	Distributed Situation Awareness and Mixed-Initiative Interaction for Collaborative Robotics	Patrick Doherty Elin Anna Topp	Collaborative Robotics	B09
Julian Salt Ducaju	Joint Stiction Avoidance with Null-Space Motion in Real-Time Model Predictive Control for Redundant Collaborative Robots	Patrick Doherty Elin Anna Topp	Collaborative Robotics	B09
Johan Edstedt	Geometrically Constrained Learning for Vision	Michael Felsberg Anders Heyden	Geometrically Constrained Learning for Vision	B10
Kalle Åström	Local Positioning Systems	Kalle Åström Fredrik Gustafsson	Local Positioning Systems	B11
Kalle Åström	Robust Multilateration	Kalle Åström Fredrik Gustafsson	Local Positioning Systems	B11
Gustav Zetterqvist	Wearable Microphone Arrays	Kalle Åström Fredrik Gustafsson	Local Positioning Systems	B11
Xuhong Li	Sequential Detection and Estimation of Multipath Channel Parameters Using Belief Propagation	Kalle Åström Fredrik Gustafsson	Local Positioning Systems	B11
Russel Whiton	Cellular Localization for Autonomy	Kalle Åström Fredrik Gustafsson	Local Positioning Systems	B11
Rym Jaroudi	A Non-linear Conjugate Gradient optimizer for neural ODE-based networks	Ingrid Hotz Bo Bernhardsson	Visual Feature Based Data Reduction	B12
Ehsan Miandji	A non-parametric sparse BRDF model	Ingrid Hotz Bo Bernhardsson	Visual Feature Based Data Reduction	B12
Jochen Jankowai	Robust topological features for diffusion tensor imaging data	Ingrid Hotz Bo Bernhardsson	Visual Feature Based Data Reduction	B12
Frida Heskebeck	An Adaptive Approach for Task-Driven BCI Calibration	Ingrid Hotz Bo Bernhardsson	Visual Feature Based Data Reduction	B12
Martin Gemborn-Nilsson	Towards visualising and understanding EEG signals	Ingrid Hotz Bo Bernhardsson	Visual Feature Based Data Reduction	B12

Name	Poster Title	PI Co-PI	Project Title	Project Number
Yannick Strocka	Distributed optimization for system identification of networks of systems	Anders Hansson Anders Rantzer	Scalable Optimization for Learning in Control	B13
Johan Grönqvist	Closed Loop Guarantees with Neural Networks in Control	Anders Hansson Anders Rantzer	Scalable Optimization for Learning in Control	B13
Zheng Jia	Autonomous Resilient Mobile Robot Path-Tracking Control under Force-Interaction Constraints	Anders Robertsson Lars Nielsen	Autonomous Force-Aware Swift Motion Control	B14
Theodor Westry	Resilient Motion Planning and Control for Autonomous Vehicles Using Learning-Based Prediction Techniques	Anders Robertsson Lars Nielsen	Autonomous Force-Aware Swift Motion Control	B14
Nikolaos Pappas	Information Handling in Industrial IoT	Nikolaos Pappas Emma Fitzgerald	Information Handling in Industrial IoT	B15

Projects C

Name	Poster Title	PI	Project Title	Project Number
Claudio Altafini	Dynamics of Complex Socio-Technological Network Systems	Claudio Altafini Emma Tegling	Dynamics of Complex Socio-Technological Network Systems	C1
Bayu Beta Brahmantio	Statistical Methods Development for Tree-based Models	Krzysztof Bartoszek,Niklas Wahlberg	Developing Core-Technologies for Tree-Based Models	C2
Rikard Olajos	Real-Time Realistic Pixel Synthesis using Deep Learning for Augmented and Virtual Reality	Michael Doggett, Patric Ljung	Real-Time Realistic Pixel Synthesis using Deep Learning for Augmented and Virtual Reality	C3
Johanna Wilroth	Brain-Based Monitoring of Sound: Auditory attention and source tracking using EEG	Martin Enqvist, Maria Sandsten	Brain-Based Monitoring of Sound	C4
Oskar Keding	Brain-Based Monitoring of Sound: Optimal Time-Frequency Representations of EEG	Maria Sandsten, Martin Enqvist	Brain-Based Monitoring of Sound	C4
Michail Boulasikis	Design and Evaluation Framework for Stream Processing Architectures	Jörn Janneck Håkan Grahn	GPAl — General Purpose AI Computing	C5
Johan Lundgren	In situ real-time characterization of large 5G and beyond antenna system	Mats Gustafsson, Magnus Berggren,	In situ real-time characterization of large 5G and beyond antenna system	C6
Andreas Jakobsson	Diagnosing vocal characteristics to track patients' health	Andreas Jakobsson, Johan Sanmartin Berglund	The DiaVoc project: Diagnosing vocal characteristics to track patients' health	C7
Zhanyu Tuo	Latent representations for situation adaptive robot perception	Per-Erik Forssén	Situation Aware Perception for Safe Autonomous Robotics Systems	C8
Simon Lind	Confidence for Adaptive Perception Systems	Volker Krueger	Situation Aware Perception for Safe Autonomous Robotics Systems	C8
Per Runeson for Konstantin Malysh	B2B Data Sharing for Industry 4.0 Machine Learning	Per Runeson	B2B Data Sharing for Industry 4.0 Machine Learning	C9