

Curriculum Vitæ

Erik G. Ström

Updated October 7, 2020

Contact Information

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Education

Degrees

- Ph.D. in Electrical Engineering, University of Florida, Gainesville, FL, Dec. 1994.
- Master of Science in Electrical Engineering, Royal Institute of Technology, Stockholm, Sweden, Feb. 1990.

Pedagogic Education

- Supervision on Supervision (Handledning på handledning), 90 hours, Frischer & Company and SOLA Coaching AB, 2009-2010.
- Research Supervision Course (Forskarhandledningskurs). Chalmers University of Technology, 2000.
- Pedagogic Course (Pedagogisk fortsättningskurs). Chalmers University of Technology, 1998
- Fundamental Pedagogic Course (Pedagogisk baskurs). Chalmers University of Technology, 1996.
- Basic Pedagogic Course (Pedagogisk grundutbildning). Royal Institute of Technology, 1987.

Other Training (selected)

- Chalmers leadership program, Chalmers, 2014-15
- Individual leadership program, SOLA Coaching AB, 2007

Academic Appointments

- January 2005–present, Head of the Division of Communications, Antennas and Optical Networks, Dept. of Electrical Engineering¹, Chalmers University of Technology, Gothenburg, Sweden.
- November 2006–present: Full Professor in Communication Systems (Professor), Chalmers University of Technology, Dept. of Signals and Systems, Gothenburg, Sweden.
- September 2006–June 2012, Guest Professor (5% appointment), School of Information Science, Computer, and Electrical Engineering, Halmstad University, Halmstad, Sweden.
- June 2003–October 2006: Professor in Communication Systems (Biträdande Professor), Chalmers University of Technology, Dept. of Signals and Systems, Gothenburg, Sweden.
- April 2000–May 2003: Associate Professor and Docent (Docent), Chalmers University of Technology, Dept. of Signals and Systems, Gothenburg, Sweden.
- June 1996–April 2000: Associate Professor (Lektor), Chalmers University of Technology, Dept. of Information Theory, Gothenburg, Sweden.
- Feb. 1996–May 1996: Research Associate (Forskarassistent), Royal Institute of Technology, Dept. of Signals, Sensors and Systems, Signal Processing, Stockholm, Sweden.
- Jan. 1995–Jan. 1996: Postdoc, Royal Institute of Technology, Dept. of Signals, Sensors and Systems, Signal Processing, Stockholm, Sweden.
- Jan. 1993–Dec. 1994: Research Assistant to Dr. Scott L. Miller, University of Florida, Gainesville, FL.

¹The Dept. of Signals and Systems changed name to Electrical Engineering on May 1, 2017. The division name has fluctuated during the years due re-organizations, but has always included the Communication Systems Group.

- Aug. 1990–Dec. 1992: Research Assistant to Dr. Fred J. Taylor, University of Florida, Gainesville, FL.
- 1985–1988: Teacher, Royal Institute of Technology, Stockholm, Sweden. Taught electro magnetic field theory and electrical circuits.

Awards and Scholarships

- 2020: Chalmers' Area of Advance Award
- 2018: main supervisor of Wanlu Sun who received the 2018 IEEE Sweden VT-COM-IT Joint Chapter Best Student Journal Paper Award
- 2009: Chalmers' PhD. Supervisor of the Year.
- 1998: Chalmers' Pedagogical Prize.
- 1990–1992: *John och Karin Engbloms Stipendiefond*. Scholarship.
- 1989: *Silverepsilon*. Highest honor awarded students by the Electrical Engineering Student Section at the Royal Institute of Technology.

Secured Grants as PI (selected)

Secured grants as PI worth more than 77 MSEK.

- 2018, Swedish Research Council (VR): 2018-04359 *Timely Communication: Theory and Practice for the Automated Society*, 4 000 kSEK
- 2017 Sweden's Innovation Agency (Vinnova): 2016-00460 *ChaseOn*, 45 925 SEK
- 2017, EU Horizon 2020: *5G Communication Automotive Research and innovation (5GCAR)*, 502 kEUR
- 2015, Swedish Research Council (VR): 2014-06066 *Theory and practice for optimum spectral efficiency for ad-hoc wireless networks with strict requirements on latency and reliability*, 3 643 kSEK
- 2014, Sweden's Innovation Agency (Vinnova), FFI project: 2014-01387 *5G for Vehicular Applications*, 4 000 kSEK
- 2012, Sweden's Innovation Agency (Vinnova), Chase project: *Antenna Systems for V2X Communication*, 1 920 kSEK
- 2012, Swedish Research Council (VR): 2011-05824 *Channel State Information Estimation for Enabling Cooperative Communications in Vehicular Ad-Hoc Networks*, 2 460 kSEK
- 2009, Sweden's Innovation Agency (Vinnova), SAFER project: *SAFER A19 Physical layer techniques for vehicle-to-vehicle communications*, 1 323 kSEK
- 2008, EU Framework Program 7: *NEtwork of Excellence in Wireless COMmunications++ (NEW-COM++)*, 72 500 EUR
- 2008, Swedish Foundation for Strategic Research (SSF): SM07-0025 *Wireless communication and positioning for traffic safety*, 1 100 kSEK
- 2008, Swedish Research Council (VR): 2007-6363 *Positioning of nodes in wireless sensor networks*, 2 250 kSEK
- 2005, Gunnar och Märtha Bergendahl Foundation: *Roadnet*, 1 600 kSEK
- 2003, Swedish Research Council (VR): 2002-5074 *Iterative Channel Estimation and Detection for Long-Code CDMA Systems*, 1 866 kSEK
- 2000, Swedish Technology Research Council (TFR): 271-1999-638 *Iterative Detection and Channel Estimation for High-Capacity CDMA Systems*, 1 186 kSEK
- 1998, ISS '90 Foundation: *Broadband Transmission Techniques for Future Wireless Networks*, 200 kSEK

Professional Activities

IEEE

- Member of the board for the IEEE VT/COM Chapter, Sweden Section, 2000–June 2006.
- Elevated to Senior Member status of the IEEE in 2001.

Conference Committees

- Co-organizer, special session at the International Symposium on Wireless Communication Systems (ISWCS) on *V2X Communication*, 2020
- Sponsor Chair, IEEE Information Theory Workshop, 2019
- Co-organizer, EuCNC workshop *Vertical Industries & Services for 5G (VIS5G)*, 2018
- Track Co-Chair, MAC and Cross-Layer Design, IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 2016
- Co-organizer of EU COST Action IC1004 Training School on *Methods and Performance Metrics for Assessing Vehicular Communication Systems*, Jan. 2015.
- Exhibition and sponsor co-chair, FAST-zero Symposium, 2015. (Technical sponsor: IEEE Sweden VT-COM-IT joint Societies chapter).
- Finance Chair of the International Conference on Localization and GNSS (ICL-GNSS), 2015
- Co-organizer of 1st IEEE ICC Workshop on Dependable Vehicular Communications (DVC), London, 2015.
- Organizer of the 20th Annual Swedish Workshop on Wireless Systems, December, 2014.
- Finance Chair of the Swedish Communication Technologies Workshop, 2013. (Technical sponsor: IEEE Sweden VT-COM-IT joint Societies chapter)
- Finance Chair of the 7th International Symposium on Turbo Codes & Iterative Information Processing, 2012.
- Co-Chair of Workshop on Vehicular Connectivity at IEEE International Conference on Communications, 2010
- Co-organizer (together with Tony Ottosson) of the 6th Annual Swedish CDMA workshop December, 2000 and the 11th Annual Swedish Workshop on Wireless Systems.
- Co-founder (together with Stefan Parkvall, Tony Ottosson, and Ann-Louise Johansson) and organizer of the First Annual Swedish CDMA Workshop in December 1995. The conference is still organized every year, but now under the name Annual Swedish Workshop on Wireless Systems.
- Member of the Technical Program Committee for IEEE International Conference on Communications, 2002; IEEE Vehicular Technology Conference, Spring 2004; IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, 2006; European conference on Wireless Sensor Networks, 2008; International Workshop on Synergies in Communications and Localization, 2009; European Signal Processing Conference, 2009; 7th Workshop on Positioning, Navigation and Communication, 2010; 8th Workshop on Positioning, Navigation and Communication, 2011; European Wireless, 2011; NEW-COM++/COST2100 Joint Workshop, 2011; International Conference on Telecommunications for Intelligent Transport Systems, 2011; IEEE International Conference on Communications, 2012; European Wireless, 2012; IEEE International Conference on Communications, 2013; International Symposium on Wireless Vehicular Communications, 2013; IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), 2013; ACM International Workshop on VANET, 2013; SmartVehicles'14 (affiliated workshop of IEEE WoWMoM 2014); International Conference on Localization and GNSS 2015, SmartVehicles'15 (affiliated workshop of IEEE WoWMoM 2015); 12th Workshop on Positioning, Navigation and Communications (WPNC) 2015; 3rd Workshop on 5G Mobile and Wireless Communication Systems for 2020 and beyond (MWC2020) in conjunction with VTC-Spring; IEEE Global Communications Conference 2015

Journal Editorship and Review Work

- Lead Co-Guest Editor for the special issue of the Proceedings of the IEEE on Vehicular Communications, vol. 99, no. 7, July 2011.
- Co-Guest Editor for the special issue of the IEEE Journal on Selected Areas in Communications on Multiuser Detection for Advanced Communication Systems and Networks, vol. 26, no. 3, April 2008.
- Co-Guest Editor for the special issue of the IEEE Journal on Selected Areas in Communications on Signal Synchronization in Digital Transmission Systems, vol. 19, no. 12, Dec. 2001.

- Reviewer for several leading scientific conferences and journals including IEEE Transactions on Communications, IEEE Transaction on Signal Processing, IEEE Journal on Selected Areas in Communications, IEEE Communications Letters, IEEE Transactions on Wireless Communications, IEEE Journal on Vehicular Technology, IEEE Transactions on Information Theory, IEEE Transactions on Circuits and Systems - Part II, IEEE Communications Magazine

External Committee Work

- Member of EURECOM Scientific Council, 2018-2020
- Member of the Management Committee and co-chair of the Experimental Working Group for Internet of Things of the EU COST action CA15104, *Inclusive Radio Communication Networks for 5G and beyond (IRACON)*, 2016–2020
- Co-Chair of the Topical Working Group on Vehicular Environment in the EU COST action IC1004 *Cooperative Radio Communications for Green Smart Environments*, 2011–2015
- Member of the reference group formed by the Swedish National Agency for Higher Education to propose guidelines for PhD examination rights at Swedish universities, 2009-2010
- Member of the Management Committee of the EU COST action 2100 *Pervasive Mobile & Ambient Wireless Communications*, 2006–2011
- Member of the Swedish delegation to the seminars on international cooperation organized by the Swedish Foundation for International Cooperation in Research and Higher Education (STINT) in Indonesia 1997 and Mexico 2000.

External Review Assignments

Appointments and promotions

- Served as external expert in a case of suspected scientific misconduct, Lund University, 2017
- Served as the external evaluator in the promotion of a Professor at Univ. of Surrey, 2017
- Served as the external evaluator in the promotion of a Professor Class 2 at EURECOM, 2017
- Served as the external evaluator in the appointment of an Associate Professor in wireless machine-to-machine communications, ref. no. 42160, at Aalborg University, 2015
- Served as the external evaluator in the appointment of an Assistant Professor in Efficient Algorithms for Broadband Wireless Communications, ref. no. 201211, at Aalborg University, 2012;
- Served as an external evaluator in the appointment of an Universitetslektor (Associate Professor), ref. no. PA 2011/26, at Lund University, 2012
- Served as an external evaluator in the appointment of a Lektor (Associate Professor), ref. no. VL-2011-0094, at the Royal Institute of Technology, 2012
- Served as an evaluator or an Docentship application at Tampere University of Technology, 2007
- Served as an evaluator in the appointment of an Associate Professor in Signal Processing (ref. no. 249/2001) at Luleå Tekniska Universitet, 2001.

Research proposals

- Reviewer for Knut och Alice Wallenberg Stiftelse, 2017
- Member of evaluation board for Natural and Technology Sciences at the Swedish Foundation for International Cooperation in Research and Higher Education (STINT), 2014–2015
- Reviewer for the funding agency Research Foundation–Flanders (FWO), Belgium, 2013
- Reviewer for the funding agency Technology Foundation STW, the Netherlands, 2012
- Reviewer for the Israel Science Foundation, 2012.
- Member of the VR evaluation panel for Signals and Systems (NT-T), 2009
- Reviewer for the Swedish Research Council (VR), Sida/SAREC's program *Swedish Research Links* (one review)
- Reviewer for the Swedish Research Council for Engineering Science (TFR, two reviews).

Graduate students

- Served as the external reviewer for a Ph.D. thesis at University of Oulu, Oulu, Finland

- Served as faculty opponent for Licentiate defenses at Luleå University of Technology, Luleå, Sweden, the Royal Institute of Technology, Stockholm, Sweden, and Linköping University, Linköping, Sweden.
- Served as faculty opponent for Ph.D. defenses at Tampere University of Technology, Tampere, Finland; Helsinki University of Technology, Helsinki, Finland; Vienna University of Technology, Vienna, Austria (five times); University of Oslo, Norway; Karlsruhe Institute of Technology, Germany; University of Oulu, Finland; Stellenbosch University, South Africa; Technical University of Braunschweig, Germany; Technical University of Berlin, Germany; Mid Sweden University, Sweden
- Member of the grading committee at Ph.D. defenses at Chalmers, Lund University, the Royal Institute of Technology, Linköping University, Technical University of Catalonia (UPC), National Institute of Applied Sciences (INSA) of Rennes, EURECOM, Uppsala University

Chalmers Leadership and Committee Work

- Director of the Vinnova Competence Centre *ChaseOn*, 2017–present
- Member of the steering group of the Department of Electrical Engineering (formerly called Signals and Systems), 2005–present
- Leader of the competence area Sensors and Communications at SAFER, 2006–2019
- Member of the Extended Management Group at VINNOVA-sponsored center SAFER–Vehicle and Traffic Safety Centre, 2006–2016
- Member of the Research Council of the Chalmers Area of Advance Information and Communication Technologies, 2010–2016
- Member of the Research Council of the Chalmers Area of Advance Transport/Traffic Safety, 2009–2014
- Member of the board for the Center for Pedagogic Development, Chalmers University of Technology, 2000–2001
- Director of the International Master’s program *Digital Communication Systems and Technology*, Chalmers University of Technology, 1997–2001

Experience of Supervision

- Main supervisor of the following Ph.D.’s and Licentiates
 - Anver Hisham, Chalmers, Ph.D. degree awarded 2020, Chalmers
 - Edith Condo, Licentiate degree awarded 2017, Chalmers
 - Wanlu Sun, Ph.D. degree awarded 2016, Chalmers
 - Katrin Sjöberg (prev. Bilstrup), Ph.D. degree awarded 2015, Chalmers/University of Halmstad
 - Mohammad Reza Gholami, Ph.D. degree awarded 2013, Chalmers
 - Kasra Haghighi. Ph.D. degree awarded 2013, Chalmers
 - Johan Lassing, Ph.D. degree awarded 2005, Chalmers
 - Pei Xiao, Ph.D. degree awarded 2004, Chalmers
 - Fredrik Malmsten, Licentiate degree awarded 2002, Chalmers
- Co-supervisor of the following Ph.D.’s
 - Arash T. Toyserkani, Ph.D. degree awarded 2010, Chalmers
 - Hongxia Zhao, Ph.D. degree awarded 2008, Chalmers
 - Mats Rydström, Ph.D. degree awarded 2008, Chalmers
 - Anders Persson, Ph.D. degree awarded 2004, Chalmers
 - Ola Wintzell, Ph.D. degree awarded 2002, Lund University of Technology.
 - Keerthi Kumar Nagalapur, Chalmers, Ph.D. degree 2018, Chalmers
 - Gabriel Garcia, Ph.D. degree awarded 2018, Chalmers
 - Markus Fröhle, Ph.D. degree awarded 2018, Chalmers
 - Rahul Devassy, Chalmers, Ph.D. degree awarded 2019, Chalmers
- Currently main supervisor of the following Ph.D. students:
 - Johan Östman, Chalmers, Licentiate degree awarded 2019, Chalmers

- A. Oguz Kislal, Chalmers, Chalmers
- Currently co-supervisor of the following Ph.D. students:
 - Chouaib Bencheikh Lehocine
- Examiner and/or supervisor of numerous Master's degree students.

Invited Talks, Tutorials, and Popular Science Presentations (selected)

- [PS32] "Reliable and Timely (V2X) Communication," Technical University Berlin, Berlin, Germany, Jan. 16, 2020.
- [PS31] "Reliable and Timely (V2X) Communication," Technical University Vienna, Vienna, Austria, Nov. 22, 2019.
- [PS30] "Reliable and Timely (V2X) Communication," IEEE Communication Theory Workshop, Selfoss, Iceland, May 28, 2019.
- [PS29] "Satellites and 5G," Rymdforum, Trollhättan, Sweden, March 25, 2019.
- [PS28] "Test Tracks in the Automated Driving Era: Testing Wireless Communication for Cooperative Intelligent Transport Applications," 47th European Microwave Conference, Nuremberg, Germany, Oct. 8, 2017
- [PS27] "Medium Access for V2X Communication: State-of-the-Art and Open Problems", 9th International Workshop on Multiple Access Communications (MACOM'16), Aalborg, Denmark, Nov. 22, 2016. **Keynote address.**
- [PS26] "5G Ultra-Reliable Communications for Vehicular Applications," International Symposium on Wireless Communication Systems (ISWCS'16), Poznan, Poland Sept. 2016. **Keynote address.**
- [PS25] "V2X Communication State-of-the-Art and Open Problems," European Future of Wireless Technologies Workshop, Stockholm, June 2016.
- [PS24] "5G—not just a faster 4G," RUAG Sweden AB, Gothenburg, Sweden, May. 2016.
- [PS23] "5G—not just a faster 4G," Cybercom Sweden AB, Gothenburg, Sweden, May. 2016.
- [PS22] "5G—not just a faster 4G," Lindholmen Software Development Day, Gothenburg, Sweden, Oct. 2015. **Keynote address.**
- [PS21] "Bilar som pratar," The Royal Swedish Academy of Engineering Sciences (IVA), Gothenburg, May 2015
- [PS20] "Wireless Communication: An Enabler for a Safer and Greener Transport Systems," The Royal Swedish Academy of Engineering Sciences (IVA), Stockholm, May 2015
- [PS19] "Trådlös kommunikation ger säkrare resor," Vetenskapsfestivalen (science fair), Gothenburg, May 2015
- [PS18] "Vehicular Communications: State-of-the-art and Remaining Challenges," XV National Conference on Radio-communications and Broadcasting - KKRRiT, Lodz, Poland, April 2015.
- [PS17] "5G—not just a faster 4G," Gothenburg-Backa Rotary Club, Gothenburg, Sweden, Mar. 2015
- [PS16] "5G—not just a faster 4G," Volvo Group Trucks Technology (GTT), Gothenburg, Sweden, Feb. 2015
- [PS15] "V2X Communication, Standards, and C-ITS requirements," EU COST Action IC1004 Training School on *Methods and Performance Metrics for Assessing Vehicular Communication Systems*, Dublin, Ireland, Jan. 2015.
- [PS14] "5G—Vad är det och varför är det viktigt?," Metis Forum, Gothenburg, Sweden, Nov. 2014
- [PS13] "5G—Allt kommunicerar," Folkuniversitetet, Vänersborg, Sweden, Oct. 2014
- [PS12] "Device-to-device communication for 5G," University of Southern California, Los Angeles, California, Aug. 2014
- [PS11] "5G—Allt kommunicerar," Vetenskapsfestivalen (science fair), Gothenburg, May 2014
- [PS10] "Future Wireless 5G and Evolved Wi-Fi," Nolato Silikonteknik, Hallsberg, Sweden, March 2014
- [PS9] "Sensor node localization based on two-way time-of-arrival ranging with imperfect clocks," Annual Swedish Workshop on Wireless Systems, Dec. 2013
- [PS8] "On 20 MHz Channel Spacing for V2X Communication based on 802.11 OFDM," Workshop on Wireless Vehicular Communications, Halmstad, Sweden, Nov. 2013
- [PS7] "Sensor node localization based on two-way time-of-arrival ranging with imperfect clocks," University of Southern California, Los Angeles, California, Aug. 2013

- [PS6] "Robust Positioning in Non-Line of Sight Environments using Projections Onto Convex Sets (POCS)," IEEE talk at Aerospace Corporation, Los Angeles, California, Aug., 2013
- [PS5] "5G: What is it and why is important?," Toyota Info Technology Center, Sunnyvale, California, Aug. 2013
- [PS4] "METIS 5G Cellular System for V2X (and much more)," SAFER lunch seminar, Gothenburg, May 2013
- [PS3] "Framtidens trafik – säker och hållbar: Sensorer och kommunikation" Vetenskapsfestivalen (science fair), Gothenburg, May 2013
- [PS2] "Physical Layer Techniques for Vehicle-to-Vehicle Communications," SAFER lunch seminar, Gothenburg, March 2013
- [PS1] "Vehicle-to-Vehicle and Vehicle-to-Infrastructure Communications," VTI transportforum, Linköping, Sweden, Jan. 2013

List of Publications

Thesis

- [T1] Erik G. Ström. *Direct-Sequence Code-Division Multiple Access Systems: Near-Far Resistant Parameter Estimation and Detection*. PhD thesis, University of Florida, Dept. of Electrical Engineering, Gainesville, FL, December 1994.

Refereed Journal Papers

- [J58] Johan Östman, Rahul Devassy, Guiseppe Durisi, and Erik Ström. "Short-packet transmission via variable-length codes in the presence of noisy stop feedback." Accepted for publication *IEEE Trans. Wireless Comm.* 2020.
- [J57] Anver Hisham, Erik G. Ström, and Fredrik Brännström. "Radio resource management for V2V multihop communication considering adjacent channel interference." Accepted for publication *IEEE Trans. Intell. Transp. Syst.* 2020.
- [J56] Konstantinos Antonakoglou, Nadia Brahmi, Taimoor Abbas, Antonio E. Fernandez Barciela, Mate Boban, Kai Cordes, Mikael Fallgren, Laurent Gallo, Apostolos Kousaridas, Zexian Li, Toktam Mahmoodi, Erik G. Ström, Wanlu Sun, Tommy Svensson, Guillaume Vivier, and Jesus Alonso-Zarate. "On the needs and requirements arising from connected and automated driving." *J. Sens. Actuator Netw.*, vol. 9, no. 2, 2020. Article no. 24.
- [J55] Keerthi Kumar Nagalapur, Fredrik Brännström, Erik G. Ström, and Kristian Karlsson. "Robust connectivity with multiple directional antennas for vehicular communications." Accepted for publication *IEEE Trans. Intell. Transp. Syst.* 2019.
- [J54] Anver Hisham, Erik G. Ström, Fredrik Brännström, and Li Yan. "Scheduling and power control for V2V broadcast communications with co-channel and adjacent channel interference." *IEEE Access*, 2019.
- [J53] Keerthi Kumar Nagalapur, Fredrik Brännström, and Erik G. Ström. "Performance analysis of receivers using sector antennas for broadcast vehicular communications." *IEEE Trans. Commun.*, vol. 67, no. 5, pp. 3677–3692, May 2019.
- [J52] Johan Östman, Giuseppe Durisi, Erik G. Ström, Mustafa C. Coşkun, and Gianluigi Liva. "Short packets over block-memoryless fading channels: Pilot-Assisted or noncoherent transmission?" *IEEE Trans. Commun.*, vol. 67, no. 2, pp. 1521–1536, February 2019.
- [J51] Petar Popovski, Jimmy J. Nielsen, Čedomir Stefanović, Elisabeth de Carvalho, Erik G. Ström, Kasper F. Trillingsgaard, Alexandru-Sabin Bana, Dong Min Kim, Radoslaw Kotaba, Jihong Park, and Renée B. Sørensen. "Wireless access for ultra-reliable low-latency communication (URLLC): Principles and building blocks." *IEEE Network Magazine*, vol. 32, no. 2, pp. 16–23, March 2018.
- [J50] Wanlu Sun, Fredrik Brännström, and Erik G. Ström. "Network synchronization for mobile device-to-device systems." *IEEE Trans. Commun.*, vol. 65, no. 3, pp. 1193–1206, March 2017.
- [J49] Mohammad Reza Gholami, Sinan Gezici, and Erik G. Ström. "TW-TOA based positioning in the presence of clock imperfections." *Digit. Signal Processing*, vol. 59, pp. 19–30, December 2016.
- [J48] Mohammad Reza Gholami, Magnus Jansson, Erik G. Ström, and Ali H. Sayed. "Diffusion estimation over cooperative multi-agent networks with missing data." *IEEE Trans. on Signal and Inf. Process. over Netw.*, vol. 2, no. 3, pp. 276–289, September 2016.
- [J47] Keerthi Kumar Nagalapur, Fredrik Brännström, Erik G. Ström, Fabian Undi, and Kim Mahler. "An 802.11p cross-layered pilot scheme for time- and frequency-varying channels and its hardware implementation." *IEEE Trans. Veh. Commun.*, vol. 65, no. 6, pp. 3917–3928, June 2016.
- [J46] Wanlu Sun, Di Yuan, Erik G. Ström, and Fredrik Brännström. "Cluster-based radio resource management for D2D-Supported safety-critical V2X communications." *IEEE Trans. Wireless Commun.*, vol. 15, no. 4, pp. 2756 – 2769, 2016.

- [J45] Wanlu Sun, Erik G. Ström, Fredrik Brännström, Kin Cheong Sou, and Yutao Sui. "Radio resource management for D2D-based V2V communication." *IEEE Trans. Veh. Technol.*, vol. 65, no. 8, pp. 6636–6650, August 2016.
- [J44] Sajjad Beygi, Urbashi Mitra, and Erik G. Ström. "Nested sparse approximation: Structured estimation of V2V channels using geometry-based stochastic channel model." *IEEE Trans. Signal Process.*, vol. 63, no. 18, pp. 4940–4955, September 2015.
- [J43] Wanlu Sun, Erik G. Ström, Fredrik Brännström, and Mohammad Reza Gholami. "Random broadcast based distributed consensus clock synchronization for mobile networks." *IEEE Trans. Wireless Commun.*, vol. 14, no. 6, pp. 3378–3389, June 2015.
- [J42] Mohammad Reza Gholami, Erik G. Ström, Henk Wymeersch, and Mats Rydström. "On geometric upper bounds for positioning algorithms in wireless sensor networks." *Signal Processing*, vol. 111, pp. 179–193, 2015.
- [J41] Kasra Haghighi, Erik G. Ström, and Erik Agrell. "Sensing or transmission: Causal cognitive radio strategies with censorship." *IEEE Trans. Wireless Commun.*, vol. 13, no. 6, pp. 3031–3041, June 2014.
- [J40] Mohammad Reza Gholami, Erik G. Ström, Henk Wymeersch, and Sinan Gezici. "Upper bounds on position error of a single location estimate in wireless sensor networks." *EURASIP Journal on Advances in Signal Processing*, vol. 2014:1, January 2014.
- [J39] Mohammad Reza Gholami, Luba Tretushvili, Erik G. Ström, and Yair Censor. "Cooperative wireless sensor network positioning via implicit convex feasibility." *IEEE Trans. Signal Process.*, vol. 61, no. 23, pp. 5830–5840, December 2013.
- [J38] Reza Monir Vaghefi, Mohammad Reza Gholami, and Erik G. Ström. "RSS-based sensor localization in the presence of unknown channel parameters." *IEEE Trans. Signal Process.*, vol. 61, no. 15, pp. 3752–3759, 2013.
- [J37] Mohammad Reza Gholami, Sinan Gezici, and Erik G. Ström. "TDOA based positioning in the presence of unknown clock skew." *IEEE Trans. Commun.*, vol. 61, no. 6, pp. 2522–2534, 2013.
- [J36] Mohammad Reza Gholami, Sinan Gezici, and Erik G. Ström. "A concave-convex procedure for TDOA based positioning." *IEEE Communication Letters*, vol. 17, no. 4, pp. 765–768, 2013.
- [J35] Reza Monir Vaghefi, Mohammad Reza Gholami, R. Michael Buehrer, and Erik G. Ström. "Cooperative received signal strength-based sensor localization with unknown transmit powers." *IEEE Trans. Signal Process.*, vol. 61, no. 6, pp. 1389–1403, March 2013.
- [J34] Kasra Haghighi, Erik G. Ström, and Erik Agrell. "On optimum causal cognitive spectrum reutilization strategy." *IEEE J. Sel. Areas Commun.*, vol. 30, no. 10, pp. 1911–1921, November 2012.
- [J33] Mohammad Reza Gholami, Sinan Gezici, and Erik G. Ström. "Improved position estimation using hybrid TW-TOA and TDOA in cooperative networks." *IEEE Trans. Signal Process.*, vol. 60, no. 7, pp. 3770–3785, 2012.
- [J32] Mohammad Reza Gholami, Henk Wymeersch, Erik G. Ström, and Mats Rydström. "Wireless network positioning as a convex feasibility problem." *EURASIP Journal on Wireless Communications and Networking*, vol. 2011, no. 1, pp. 161, 2011.
- [J31] Erik G. Ström. "On medium access and physical layer standards for cooperative intelligent transport systems in Europe." *Proc. IEEE*, vol. 99, no. 7, pp. 1183–1188, July 2011. Invited paper.
- [J30] Jens Mittag, Stylianos Papanastasiou, Hannes Hartenstein, and Erik G. Ström. "Enabling accurate cross-layer PHY/MAC/NET simulation studies of vehicular communication networks." *Proceedings of the IEEE*, vol. 99, no. 7, pp. 1311–1326, July 2011. Invited paper.
- [J29] Arash T. Toyserkani, Erik G. Ström, and Arne Svensson. "An analytical approximation to the block error rate in Nakagami-m non-selective block fading channels." *IEEE Transactions on Wireless Communications*, vol. 9, no. 5, pp. 1536–1546, May 2010.
- [J28] Pei Xiao and Erik G. Ström. "Soft demodulation algorithms for orthogonally modulated and convolutionally coded DS-CDMA systems." *IEEE Trans. Commun.*, vol. 58, no. 3, pp. 742–747, March 2010.
- [J27] Arash T. Toyserkani, Mats Rydström, Erik G. Ström, and Arne Svensson. "A scheduling algorithm for minimizing the packet error probability in clustered TDMA networks." *EURASIP Journal on Wireless Communications and Networking*, pp. 1–10, 2009. Article ID 804621.
- [J26] Katrin Bilstrup, Elisabeth Uhlemann, Erik G. Ström, and Urban Bilstrup. "On the ability of the 802.11p MAC method and STDMA to support real-time vehicle-to-vehicle communications." *EURASIP Journal on Wireless Communications and Networking*, 2009. Article ID 902414.
- [J25] Pei Xiao, Jinsong Wu, Mathini Sellathurai, T. Ratnarajah, and Erik G. Ström. "Iterative multi-user detection and decoding for DS-CDMA system with space-time linear dispersion." *IEEE Trans. Veh. Technol.*, vol. 58, no. 5, pp. 2343–2353, 2009.
- [J24] Mats Rydström, Erik G. Ström, Arne Svensson, and Luca Reggiani. "Suboptimal soft range estimators with applications in UWB sensor networks." *IEEE Trans. Signal Process.*, vol. 56, no. 10, pp. 4856–4866, October 2008.

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- [NR9] Mats Rydström, Erik G. Ström, Arne Svensson, and Luca Reggiani. "An algorithm for locating point scatterers using a wide-band wireless network." Presented at COST 2100 4th MCM meeting, Wroclaw, Poland, TD(08)420, February 2008.
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