

CONTACT INFORMATION	370 Jay Street, Floor 9, Brooklyn, NY 11201	<i>E-mail:</i> ct1909@nyu.edu <i>Mobile:</i> +1 (929) 213 5658 <i>Personal Website:</i> www.caglartunc.com <i>NYU Wireless:</i> www.wp.nyu.edu/caglar
RESEARCH INTERESTS	Low-latency network design and analysis for 5G, mmWave communications for vehicular networks, applications of machine learning on 5G-NR and LTE-Advanced.	
EDUCATION	NYU Tandon School of Engineering , New York, NY, U PhD., Electrical and Computer Engineering, September 2016 - Present <ul style="list-style-type: none"> ▪ CGPA: 3.95/4.00 ▪ Advisor: Prof. Dr. Shivendra Panwar ▪ Ernst Weber Fellowship, Ph.D. ▪ Related Courses Taken: Wireless Communications, Massive MIMO, Advanced Machine Learning, Convex/Nonsmooth Optimization, Information Theory, Advanced Signal Processing, Queuing Theory Bilkent University , Ankara, Turkey M.S., Electrical and Electronics Engineering, September 2013 - June 2016 <ul style="list-style-type: none"> ▪ CGPA: 3.84/4.00 ▪ Advisor: Prof. Dr. Nail Akar ▪ Thesis title: "Energy Management in Energy Harvesting Wireless Sensor Nodes With Lifetime Constraints" ▪ TUBITAK Graduate Scholarship B.S., Electrical and Electronics Engineering, August 2009 - June 2013 <ul style="list-style-type: none"> ▪ CGPA: 3.77/4.00 ▪ Comprehensive Scholarship by Placement Examination (OYS) Ankara Ataturk Anatolian High School , Ankara, Turkey September 2005 - June 2009	
PROFESSIONAL EXPERIENCE	NYU Wireless, NYU Tandon School of Engineering , New York, NY, USA <i>Teaching/Research Assistant</i> Fall 2016 - Spring 2020 Samsung Research America , Berkeley Heights, NJ, USA <i>Intern, Standard and Mobility Innovation (SMI)</i> May 2020 - August 2020 <ul style="list-style-type: none"> ▪ Electric and magnetic fields (EMF)-based power control for Massive MIMO Futurewei Technologies , Bridgewater, NJ, USA <i>Systems Engineering Intern</i> May 2019 - August 2019 <ul style="list-style-type: none"> ▪ Data/statistical analysis and machine learning-based prediction/performance improvement of link adaptation in 5G-NR <i>Systems Engineering Intern</i> May 2018 - August 2018 <ul style="list-style-type: none"> ▪ Optimizing link adaptation in 5G-NR using machine learning techniques <i>Systems Engineering Intern</i> May 2017 - August 2017 <ul style="list-style-type: none"> ▪ Carrier aggregation in LTE-Advanced Bilkent University , Ankara, Turkey <i>Research Assistant, Graduate Teaching Assistant</i> Fall 2013 - Spring 2016 ASELSAN , Ankara, Turkey <i>Part-Time System Engineer</i> December 2012 - June 2013 <ul style="list-style-type: none"> ▪ Design of Wireless Communication Devices and Networks for Police and Gendarmerie 	
JOURNAL PUBLICATIONS	<ul style="list-style-type: none"> ▪ C. Tunc and S. Panwar. "Mitigating the Impact of Blockages in Millimeter-Wave Vehicular Networks through Vehicular Relays", <i>IEEE Open Journal of Intelligent Transportation Systems</i>, July 2021. ▪ C. Tunc, MF. Özkoç, F. Fund and S. Panwar. "The Blind Side: Latency Challenges in Millimeter Wave Networks for Connected Vehicle Applications", <i>IEEE Transactions on Vehicular Technology</i>, December 2020. 	

	<ul style="list-style-type: none"> ▪ E. O. Gamgam, C. Tunc and N. Akar. "On the Queuing Model of the Energy-Delay Trade-Off in Wireless Links with Power Control and Link Adaptation", <i>IEEE Transactions on Communications</i>, February 2019. ▪ N. Akar, C. Tunc, M. A. Gaertner and F. Erden. "Performance of Shortest Cumulative Access Time First (SCATF) Disk Scheduling Algorithms", <i>The Turkish Journal of Electrical Engineering & Computer Sciences</i>, July 2017. ▪ C. Tunc and N. Akar. "Markov Fluid Queue Model of an Energy Harvesting IoT Device with Adaptive Sensing", <i>Performance Evaluation</i>, May 2017. ▪ C. Tunc and N. Akar. "Fixed-point Analysis of a Network of Routers with Persistent UDP and TCP Flows and Class-based Weighted Fair Queuing" <i>Telecommunication Systems</i>, July 2016. ▪ C. Tunc and N. Akar. "Mapping Time-varying IP Traffic to Flexible Optical Paths in Flexgrid Optical Networks" <i>Photonic Network Communications</i>, August 2014.
PATENTS	<ul style="list-style-type: none"> ▪ Z. Lin, S. Das, C. Tunc and J. Zhang. "Apparatus and method for managing the exposure to electric and magnetic fields (EMF)", US11064443B1, July 2021.
CONFERENCE PUBLICATIONS	<ul style="list-style-type: none"> ▪ C. Tunc and S. Panwar. "Analysis of Outage Probability and Duration in Millimeter Wave Vehicle-to-Infrastructure Networks", <i>IEEE 92nd Vehicular Technology Conference: VTC2020-Fall</i>, Victoria, BC Canada. ▪ C. Tunc and S. Panwar. "Optimal Transmission Policies for Energy Harvesting Age of Information Systems with Battery Recovery", <i>2019 Asilomar Conference on Signals, Systems, and Computers</i>, Pacific Grove, CA, USA. ▪ C. Tunc, MF. Özkoç and S. Panwar. "Millimeter Wave Coverage and Blockage Duration Analysis for Vehicular Communications", <i>IEEE 90th Vehicular Technology Conference: VTC2019-Fall</i>, Honolulu, Hawaii, USA. ▪ C. Tunc and N. Akar. "Efficient Transport of Time-varying IP Traffic in Flexi-grid Optical Networks", <i>Signal Processing and Communications Applications Conference (SIU)</i>, Trabzon, Turkey, April 2014.
WORKING PAPERS	<ul style="list-style-type: none"> ▪ MF. Özkoç, C. Tunc and S. Panwar. "Data-Driven and Environment-Adaptive Beamforming Codebook Design", in progress. ▪ C. Tunc, MF. Özkoç and S. Panwar. "Uplink Measurement-based Smart Handover Schemes for 5G NR", in progress.
PRESENTATIONS	C. Tunc and N. Akar. "Performance Modeling of Delay-based Dynamic Speed Scaling", <i>The Ninth International Conference on Matrix-Analytic Methods in Stochastic Models (MAM9)</i> , Budapest, Hungary, June 2016.
THESIS	C. Tunc . "Energy Management in Energy Harvesting Wireless Sensor Nodes with Lifetime Constraints." <i>MS Thesis</i> , Bilkent University, June 2016.
LANGUAGES	English : Fluent, Spanish : Moderate, German : Beginner, Turkish : Native
COMP. SKILLS	MATLAB/CVX/Gurobi, Python, TensorFlow, Torch, VHDL, Java, C, R, AMPL, Assembly.
AWARDS & ACHIEVEMENTS	<ul style="list-style-type: none"> ▪ Ernst Weber Fellowship (PhD), NYU Tandon School of Engineering ▪ TUBITAK Graduate Scholarship ▪ Bilkent University Master of Science Study Full Scholarship ▪ Bilkent University High Honor Student (2009-2010 Fall, 2009-2010 Spring, 2010-2011 Fall, 2010-2011 Spring, 2011-2012 Fall, 2012-2013 Fall, 2012-2013 Spring) ▪ Bilkent University Honor Student (20011-2012 Spring) ▪ TUSIAD's 'Bu Gençlikte İş Var' Honourable Mention Award ▪ Comprehensive Scholarship by University Placement Examination (OYS) ▪ Ranked 420th in University Entrance Exam among 1.4 million candidates