



# Ciprian-Romeo Comșa

**Date of birth:** 23/02/1977 | **Nationality:** Romanian | **Phone number:**

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<https://www.linkedin.com/in/ccomsa/> |

**Address:** Bd. Carol I, Nr. 11A, Telecommunications Dept, Office II.11, 700506, Iași, Romania (Work)

## ABOUT ME

### Looking to:

- lead, manage, develop, and implement various teams and projects related to wireless communications and signal processing & automotive electronic control systems areas
- contribute to an educational framework to enable innovation and creativity fostering

### Personal highlights:

- Good leadership and innovation management skills
- Strong analytical and engineering background in communications and signal processing area
- Teaching, training and people developing demonstrated capabilities
- Aptitude for learning new skills, constructive critical thinking, strategic planning and implementation
- Familiarity with product life cycle (e.g., planning, analysis, testing, operations, and maintenance)
- Systems and SW development capabilities for Research and Development projects

## WORK EXPERIENCE

01/04/2024 – CURRENT Iasi, Romania

**VICE-RECTOR INNOVATION, ENTREPRENEURSHIP AND ENTERPRISE PARTNERSHIPS** GHEORGHE ASACHI TECHNICAL UNIVERSITY OF IAȘI

02/2002 – CURRENT Iasi, Romania

**ASSOCIATE PROFESSOR (2017-NOW), ASSISTANT PROFESSOR (2013-2017), TEACHING ASSISTANT (2002-2013), (ON LEAVE 2006-2011)** GHEORGHE ASACHI TECHNICAL UNIVERSITY OF IAȘI

- Coordination of Master's program "Information Technology for Telecommunications"
- Coordinator of the CONSENSUM - Connected Sensing for Ubiquitous Mobility – Applied Innovation and Research on 5G Laboratory, <https://5glab.orange.ro/en/orange-5g-lab-iasi-2/>
- Lab instructing: Computer Programming and Programming Languages (C, C++); Electronic Computer Aided Design (in Spice and VHDL); Mobile Communications; Digital Communications
- Lecturing: Automotive Connected Mobility; Mobility and Wireless Technologies; Digital Communications; Advanced Techniques for Signal Processing in Communications; Spread Spectrum Communications and MIMO Systems
- Research activities within the field of Wireless Communications and Signal Processing

**Business or Sector** Education | **Department** Faculty of Electronics, Telecommunications and Information Technology |

**Email** [ccomsa@etti.tuiasi.ro](mailto:ccomsa@etti.tuiasi.ro) | **Website** <https://etti.tuiasi.ro/>

**Link** <https://www.tuiasi.ro/?lang=en>

05/2012 – 29/02/2024 Iasi, Romania

**INNOVATION MANAGEMENT & ACADEMIC LIAISON; FUNCTIONAL SAFETY ENGINEER; TEAM LEADER (PART-TIME)** CONTINENTAL AUTOMOTIVE ROMANIA SRL

- Scout for new trends, ideas, products, start-ups
- Propose innovation projects and taking care of their implementation
- Maintain relation with local academia and supporting common projects
- Leading the Advanced Technology and Artificial Intelligence team in Iasi Chassis & Safety Division (2018-2019)
- Leading the Lights Control Unit System Engineer team in Interior, Body and Security Department from Iași (until 2017)
- Manage the full process to implement activities related to product safety during the full course of project development (from quotation until production)

- Define detailed safety planning for work product development
- Analyze client requirements, and provide safety concepts for developed work product
- Develop, maintain, and track of requirements on system level
- Ensure support in defining system architecture
- Perform the verification of safety related documents
- Supervise safety process to be employed by all the divisions engaged in the development
- Familiar with safety standards, e.g., ISO 26262
- Provide support regarding safety requirements to the engaged divisions
- Provide support in performing technical analyses, e.g. Failure Mode and Error Analysis (FMEA), Fault Tree Analysis (FTA)
- Responsible for mentoring new colleagues
- Moderate periodic meetings related to functional safety
- Deliver trainings on safety process to various divisions (e.g., SW, testing)

**Business or Sector** Professional, scientific and technical activities | **Address** Blvd. Poitiers No. 6, 700671, Iasi, Romania |

**Website** [www.continental-corporation.com](http://www.continental-corporation.com)

01/01/2006 – 31/12/2011 Newark, United States

**UNIVERSITY RESEARCH ASSISTANT** NEW JERSEY INSTITUTE OF TECHNOLOGY

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- Developed high accuracy localization techniques for sensor networks
- Derived mathematical bounds to assess the performance of the localization techniques for vary system parameters.
- Simulated the localization techniques using a system model which utilizes GSM signals
- Researched and developed optimization algorithms using convex optimization techniques
- Researched and developed localization algorithms based on compressive sensing / compressed sampling techniques

**Business or Sector** Information and communication |

**Department** Center for Wireless Communications and Signal Processing Research |

**Address** University Heights , Newark, New Jersey, 07102, Newark, United States | **Website** <http://cwcspr.njit.edu/>

2000 – 2002 Iași, Romania

**COMMUNICATION SYSTEMS DESIGN ENGINEER** S.C. ISRATECH S.R.L.

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- Integrated circuits computer aided design, using Matlab with Simulink, HDL and C++ tools
- Study of Bluetooth technology

## ● EDUCATION AND TRAINING

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08/2021 – 12/2021 Rochester, United States

**FULBRIGHT FELLOWSHIP** University of Rochester – AIN Center for Entrepreneurship, New York, USA

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- Fulbright-RAF (Romanian-American Foundation) Scholar Award in the field of Entrepreneurship & Entrepreneurial Studies for Romanian academics from technical universities and faculties
- Hold a semester-long fellowship in residence at the University of Rochester – AIN Center for Entrepreneurship, for study and independent research, curriculum development, classroom observation and participation in community-based entrepreneurial activities

**Website** <https://www.rochester.edu/aincenter/> | **Field of study** Technical Entrepreneurship and Management

01/2006 – 12/2011 Newark, New Jersey, United States

**PHD IN ELECTRICAL ENGINEERING** New Jersey Institute of Technology

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- GPA for attended classes: 3.65 on a scale of 4 to 1
- Main topics covered: Signal processing, source localization, compressive sensing
- Relevant Courses: Digital Signal Processing, Advanced Digital Signal Processing, Advanced Wireless Communications, Advanced Topics in Wireless Communications, Computer Network Design Analysis, Information Theory, Probability and Random Process

**Website** <https://www.njit.edu/> | **Field of study** Electrical and Computer Engineering |

**Thesis** Source Localization via Time Difference of Arrival

11/2000 – 06/2001 Iasi, Romania

**MASTER OF SCIENCE** Gheorghe Asachi Technical University of Iasi

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- GPA: 9.85 on a scale of 10 to 1
- Diploma Examination: 10 on a scale of 10 to 1

**Website** <https://etti.tuiasi.ro/> | **Field of study** Digital Radiocommunications

11/1995 – 06/2000 Iasi, Romania

**DIPLOMA ENGINEER IN TELECOMMUNICATIONS** Gheorghe Asachi Technical University of Iasi

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- GPA: 9.51 on a scale of 10 to 1
- Diploma Examination: 9.62 on a scale of 10 to 1

**Website** <https://etti.tuiasi.ro/> | **Field of study** Electronics, Telecommunications and Information Technology

09/1991 – 06/1995 Iasi, Romania

**BACCALAUREATE DEGREE** Computer Science High school "Grigore C. Moisil" of Iași

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- GPA: 8.67 on a scale of 10 to 1
- Baccalaureate examination: 8.83 on a scale of 10 to 1

**Website** <https://liis.ro/> | **Field of study** Computer Science

## ● LANGUAGE SKILLS

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Mother tongue(s): **ROMANIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
<b>ENGLISH</b>	C2	C2	C1	C1	C1

*Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user*

## ● DIGITAL SKILLS

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Advanced User of Microsoft Windows | Advanced user of Microsoft Office tools | Matlab/Simulink | C, C++ Programming Languages | Google Suite (Doc, Slides, Form, Sheet, Drive) | Video Conferencing (Zoom, Teams, Skype, Webex) - Advanced

## ● SKILLS, ACHIEVEMENTS, ACTIVITIES

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### Communication and interpersonal skills

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- Solid communication skills acquired through lecturing and teaching, research and development team work, both in academic and industry environments
- Pedagogical competences acquired from courses taken during 1995-2000 at the Didactical Training Department of "Gheorghe Asachi" Technical University Iași, graduated with GPA 9.25 on a scale of 10 to 1

### Organizational / managerial skills

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- Leadership skills developed through leading System Engineering teams and through research activities and from the process of supervising students
- Project management skills through participation at the Project Manager track of the POSDRU project "Dezvoltarea inovației, creativității, responsabilității și sustenabilității antreprenoriatului strategic românesc"
- Innovation and Entrepreneurship skills by graduating the program "Antreprenoriat inovativ pentru cadre didactice" at the "Gheorghe Asachi" Technical University of Iași, comprising courses on: Entrepreneurship, Business communication, Business Marketing, Business Management, as well as the course Entrepreneurial Tools and Competencies for Teachers & their Students, hosted by The Online Teacher Training Platform of the Europass Teacher Academy
- Teamwork and project management skills gained with the research activities developed during the last >15years at the "Gheorghe Asachi" Technical University of Iași and at New Jersey Institute of Technology (including collaborating with researchers from Princeton University for the US Army)

■ Organizational skills acquired from the "Organizational Culture and European Integration" postgraduate course of CETEX Department of the "Gheorghe Asachi" Technical University Iași, 2003

## Technical skills

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Expertise and professional interest areas:

- Innovation Management; Product development
- Automotive products development, Automotive communication protocols, Intervehicular (V2X) wireless communications, Requirements Engineering, Functional Safety Management
- Signal Processing for Communications. Geolocation techniques. Compressive sampling.
- Digital Communications Techniques. Bluetooth. OFDM Technique. Wireless, MIMO Systems.
- System Level Modelling and Simulation of Circuits for Telecommunications.
- Object Oriented Programming Techniques. Numerical Methods and Algorithms.
- HDL Modelling of Circuits for Telecommunications.

## Awards and achievements

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- Fulbright-RAF (Romanian-American Foundation) Scholar Award in the field of Entrepreneurship & Entrepreneurial at the University of Rochester – AIN Center for Entrepreneurship, 2021
- Second place award at The Dana Knox Student Research Showcase at NJIT, 2011
- Travel grant from the IEEE Signal Processing Society for participation at the ICASSP conference 2011
- Ross Fellowship awarded by the ECE Dept. of NJIT, 2006-2011
- Socrates Erasmus scholarship at The National Technical University of Athens, Greece, 2000
- Stipend scholarship awarded (bi-yearly evaluation) by the Romanian Ministry of Education and Research, uninterrupted during all the 6 years pursuing the Bachelor and Masters degrees, 1995-2001
- Ranked 2nd out of 15 at the graduation of the MSc program, 2001
- Ranked 5th out of 54 at the graduation of the Bachelor program, 2000

## Professional activities

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- IEEE membership: student member since 2007, member since 2012
- Member of IEEE Signal Processing Society (SPS)
- Member of IEEE Vehicular Technology Society (VTS)
- Active reviewer for scientific conferences (e.g., ISSCS) and journals (e.g., IEEE Transactions on Signal Processing, IEEE Transactions on Aerospace and Electronic Systems, Elsevier Physical Communication)
- Member of the local organization committee of The International Symposiums on Signals, Circuits and Systems

## PUBLICATIONS

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2023

### [FNWF2023](#)

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A.P. Bianzino, A. Basso, G. Caratti, **C.R. Comsa**, &all, "Trials Supported By Smart Networks Beyond 5G: the TrialsNet Approach," IEEE Future Networks World Forum, 13–15 Nov 2023, Baltimore, USA

2022

### [ECAI2022](#)

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Militaru A.V., R. G. Lazar, C. F. Caruntu, **C. R. Comsa** and I. Bogdan, "Analysis of message flow transmissions for an inter-vehicle communication scenario," 2022 14th International Conference on Electronics, Computers and Artificial Intelligence (ECAI), 2022, pp. 1-6, <https://doi.org/10.1109/ECAI54874.2022.9847482>

2021

### [ISSCS2021B](#)

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Bonea A., C. Patachia-Sultanoiu, M. Iordache, I. Constantin, A. Radulescu, **C.R. Comsa**, C.F. Caruntu, "Automated Onboarding, Testing and Validation Framework for NetApps," 2021 International Symposium on Signals, Circuits and Systems (ISSCS), 2021, pp. 1-4, <https://doi.org/10.1109/ISSCS52333.2021.9497420>

2021

### [ISSCS2021A](#)

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A. V. Militaru, C. F. Caruntu and **C. R. Comsa**, "Application Design Principles for Road Users' Safety," 2021 International Symposium on Signals, Circuits and Systems (ISSCS), 2021, pp. 1-4, <https://doi.org/10.1109/ISSCS52333.2021.9497370>

2021

**CSCS2021**

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C. F. Caruntu, A. V. Militaru and **C. R. Comsa**, "Cyber-Physical Systems-based Architecture for Signalized Traffic Corridors: Monitoring and Synchronized Coordination," 2021 23rd International Conference on Control Systems and Computer Science (CSCS), 2021, pp. 314-321, Bucharest, Romania <https://doi.org/10.1109/CSCS52396.2021.00058>

2020

**MED2020**

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C. F. Caruntu, C. Pascal, L. Ferariu and **C. R. Comsa**, "Trajectory optimization through connected cooperative control for multiple-vehicle flocking," 2020 28th Mediterranean Conference on Control and Automation (MED), 2020, pp. 915-920, <https://doi.org/10.1109/MED48518.2020.9182964>

2019

**ICSTCC**

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C. F. Caruntu, L. Ferariu, C. Pascal, N. Cleju and **C. R. Comsa**, "Connected cooperative control for multiple-lane automated vehicle flocking on highway scenarios," 2019 23rd International Conference on System Theory, Control and Computing (ICSTCC), 2019, pp. 791-796, <https://doi.org/10.1109/ICSTCC.2019.8885496>

2019

**ETFA**

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C. F. Caruntu, L. Ferariu, C. M. Pascal, N. Cleju and **C. R. Comsa**, "A Concept of Multiple-lane Vehicle Grouping by Swarm Intelligence," 2019 24th IEEE International Conference on Emerging Technologies and Factory Automation (ETFA), 2019, pp. 1183-1188, <https://doi.org/10.1109/ETFA.2019.8868955>

2019

**ISSCS**

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A. Abuneii, **C.R. Comşa**, C. F. Caruntu and I. Bogdan, "Redundancy Based V2V Communication Platform for Vehicle Platooning," in the Proceedings of the 2019 International Symposium on Signals, Circuits and Systems (ISSCS), Iasi, Romania, pp. 1-4. <https://doi.org/10.1109/ISSCS.2019.8801781>

2012

**EUSIPCO**

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**C. R. Comsa**, A. M. Haimovich, "Performance Bound for Time Delay and Amplitude Estimation from Low Rate Samples of Pulse Trains," presented at the 20th European Signal Processing Conference, EUSIPCO 2012, Bucharest, Romania, Aug. 27-31, 2012.

2011

**ICASSP**

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**C. R. Comsa**, A. M. Haimovich, S. Schwartz, Y. H. Dobyns, and J. A. Dabin, "Source Localization using Time Difference of Arrival within a Sparse Representation Framework," presented at the International Conference on Acoustics, Speech and Signal Processing, ICASSP 2011, May 22-27, Prague, Czech Republic. <https://doi.org/10.1109/ICASSP.2011.5947084>

2011

**CISS**

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**C. R. Comsa**, A. M. Haimovich, S. Schwartz, Y. H. Dobyns, and J. A. Dabin, "Time Difference of Arrival Based Source Localization within a Sparse Representation Framework," presented at the 45th Annual Conference on Information Sciences and Systems, CISS 2011, March 23-25, Baltimore, MD, USA. <https://doi.org/10.1109/CISS.2011.5766147>

2007

**ISSCS**

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**C. R. Comsa**, J. Luo, A. M. Haimovich, and S. Schwartz, "Wireless Localization using Time Difference of Arrival in Narrow-Band Multipath Systems," in the Proceedings of the IEEE International Symposium on Signals, Circuits and Systems, ISSCS 2007, vol. 2, pp. 469 - 472, Iaşi, Romania, 12-13 July 2007 <https://doi.org/10.1109/ISSCS.2007.4292764>

## ● PROJECTS

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01/2022 – 12/2024

### **TRIALSNET - TRials supported by Smart Networks beyond 5G**

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- HORIZON-JU-SNS-2022
- Project Coordination: Ericsson Telecomunicazioni SPA (TEI), Italy
- Local project manager: Ciprian Comsa (TUIASI)
- <https://trialsnet.eu/>

11/2020 – 10/2022

### **WiS4IASI - Wireless System for Intelligent Applications in Safe Intersections**

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- Financed by UEFISCDI, PED program
- Project manager: Ciprian Comsa (TUIASI)
- <https://traffic-interact.ro/wis4iasi/>