Ion George Dinu

Nationality: Romanian **Date of birth:** 19/12/2000 **Phone number:** (+40) 735558624

Email address: dinu.george0019@gmail.com

ABOUT ME

Software engineer with 4+ years building production systems and 3+ years in machine-learning research. I focus on Natural Language Processing and on integrating ML into the software development loop to deliver measurable gains in quality and speed.

WORK EXPERIENCE

Roweb Development – Craiova, Romania

Web Developer Intern

[15/05/2021 – 30/06/2021]

Continental Automotive Systems – Sibiu, Romania

Software Architect Intern

[01/07/2021 – 01/10/2021]

Forvia - Hella – Craiova, Romania

Software Engineer

[01/11/2021 – Current]

Faculty of Automation, Computers and Electronics, University of Craiova – Craiova, Romania

Associate Teaching Assistant

[01/10/2024 – Current]

- Taught the **Machine Learning Laboratory** for **4th-year Computer Science** students.
- Taught the **Data Structures and Algorithms Laboratory** for **2nd-year Computer Science** students.
- Taught the **Parallel and Distributed Algorithms Laboratory** for **3rd-year Computer Science** students.

EDUCATION AND TRAINING

Teacher Education Programme (Psychopedagogical Training), Level I & II

University of Craiova [10/2019 – 07/2025]

City: Craiova | Country: Romania

- **Cumulative grade average across the Bachelor's programme (Level I): 9.50**
- **Level I Bachelor's Thesis Grade: 10**
- **Cumulative grade average across the Master's programme (Level II): 9.83**
- **Level II Master's Dissertation Grade: 10**

Bachelor in Computer Science

Faculty of Automation, Computers and Electronics, University of Craiova [10/2019 – 07/2023]

City: Craiova | Country: Romania

- **Cumulative grade average across the Bachelor's programme: 9.69**
- **Bachelor's Thesis Grade: 10**

- During the final year of my bachelor's degree, I developed **machine learning expertise** with an emphasis on **natural language processing**, culminating in my thesis, **"Using Deep Learning Algorithms to Optimize Algorithmic Problem Solving in Competitive Programming**." supervised by Prof. Cristian Mihăescu, PhD
- **Outcomes:**
  - **"I. G. Dinu, C. Mihăescu and T. Rebedea, "Matching Problem Statements to Editorials in Competitive Programming," *2024 IEEE International Conference on Advanced Learning Technologies (ICALT)*, Nicosia, North Cyprus, Cyprus, 2024, pp. 171-175, doi: https://doi.org/10.1109/ICALT61570.2024.00056" (Conference CORE Rank B https://portal.core.edu.au/conf-ranks/628/)**
  - **ICALT 2024 - Best Student Paper Award**
  - **BRAIT (Best Romanian AI Thesis) finalist** at **Romanian AI Days 2024**.

Master in Software Engineering

Faculty of Automation, Computers and Electronics, University of Craiova [10/2023 – 07/2025]

City: Craiova | Country: Romania

- **Cumulative grade average across the Master's programme: 10**
- **Master's Dissertation Grade: 10**
- Research in **machine learning** with a focus on **natural language processing,** specifically **transformer** and **large-language-model** methods, culminating in my dissertation, **"*Optimizing the Classification and Difficulty Prediction of Problems in Competitive Programming.*"** supervised by Prof. Cristian Mihăescu, PhD
- **Outcomes:**
  - **"Dinu, I.G., Mihăescu, M.C., Rebedea, T. (2025). Domain Adaptation for Automated Tag Prediction in Competitive Programming. In: Maglogiannis, I., Iliadis, L., Andreou, A., Papaleonidas, A. (eds) Artificial Intelligence Applications and Innovations. AIAI 2025. IFIP Advances in Information and Communication Technology, vol 756. Springer, Cham. https://doi.org/10.1007/978-3-031-96228-8_11" (Conference CORE Rank C https://portal.core.edu.au/conf-ranks/2186/)**
  - **BRAIT (Best Romanian AI Thesis) finalist** at **Romanian AI Days 2025**.

Doctor of Philosophy - PhD Student

Faculty of Automation, Computers and Electronics, University of Craiova [10/2025 – Current]

City: Craiova | Country: Romania | Field(s) of study: Computers and Information Technology

- **Research Project: *Techniques and Applications Based on NLP for Source Code Analysis***
- **Research Area: Natural Language Processing, Machine Learning, and Software Engineering** — investigating novel approaches to enhance the software engineering process, structured around three core pillars: LLMs, RAG systems, and Agents.
- **Supervisor:** Prof. Cristian Mihăescu, PhD

PUBLICATIONS

Matching Problem Statements to Editorials in Competitive Programming

- **I. G. Dinu, C. Mihăescu and T. Rebedea, "Matching Problem Statements to Editorials in Competitive Programming," *2024 IEEE International Conference on Advanced Learning Technologies (ICALT)*, Nicosia, North Cyprus, Cyprus, 2024, pp. 171-175, doi: https://doi.org/10.1109/ICALT61570.2024.00056**
- **Conference CORE Rank B https://portal.core.edu.au/conf-ranks/628/**
- **Winner of Best Student Paper Award**

Domain Adaptation for Automated Tag Prediction in Competitive Programming

- **Dinu, I.G., Mihăescu, M.C., Rebedea, T. (2025). Domain Adaptation for Automated Tag Prediction in Competitive Programming. In: Maglogiannis, I., Iliadis, L., Andreou, A., Papaleonidas, A. (eds) Artificial Intelligence Applications and Innovations. AIAI 2025. IFIP Advances in Information and Communication Technology, vol 756. Springer, Cham. https://doi.org/10.1007/978-3-031-96228-8_11**
- **Conference CORE Rank C https://portal.core.edu.au/conf-ranks/2186/**

LLM Agents as Feedback Tools for Software Architecture

- I. G. Dinu, C. Mihăescu and T. Rebedea, "LLM Agents as Feedback Tools for Software Architecture" *2026* IEEE International Conference on Intelligent Systems (IS), Varna, Bulgaria, certificate: https://ieee-is-2026.blockchain2.uni-plovdiv.net/v/FE9DF673, doi: to be released
- Conference CORE Rank C https://portal.core.edu.au/conf-ranks/661/

RESEARCH EXPERIENCE

[07/2022 – 07/2023]
Research Team Member

Project name: *Development of Applications for Source Code Analysis using NLP Techniques* (Third-party Research Project No. 1C/14.01.2022), DATACRUNCHERS S.R.L. — 2022–2023

[07/2023 – 07/2024]
Research Team Member

Project name: *Development of Software Applications Integrating Machine Learning Algorithms* (Internal Research Project No. 137/04.12.2022), funded via NetRom sponsorship agreements No. 6926/20.11.2020 and No. 584/23.06.2022 — 2023–2024

ACADEMIC ACHIEVEMENTS

Honorable Mention at the 2020 Southeastern Europe Regional Contest of the ICPC (The International Collegiate Programming Contest)

Winner of Best Student Paper Award, 2024 IEEE International Conference on Advanced Learning Technologies (ICALT)

Poster presenter at Romanian AI Days 2024, BRAIT (Best Romanian AI Thesis) finalist with my bachelor's thesis.

Poster presenter at Romanian AI Days 2025, BRAIT (Best Romanian AI Thesis) finalist with my master's thesis.

SUMMER SCHOOLS

[27/07/2026 – 01/08/2026]
Eastern European Machine Learning Summer School

Admission granted on the basis of my first-year PhD research:

[2605.07001] SmellBench: Evaluating LLM Agents on Architectural Code Smell Repair

Link: https://www.eeml.eu/

LANGUAGE SKILLS

Mother tongue(s): Romanian

Other language(s):

English

LISTENING B2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION B2 **SPOKEN INTERACTION** B2

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