Miruna Clinciu

📞 (+44) 7555-493-359
✉ miruna.clinciu@gmail.com

🌐 mirunaclinciu.com
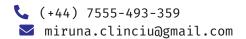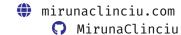⌨ MirunaClinciu

EDUCATION

Edinburgh Centre for Robotics　　　　　　　　　　　　　　　Oct. 2018 - Present
Joint degree between Heriot-Watt University and University of Edinburgh　　　Edinburgh, UK

Ph.D. candidate in Explainable AI

- **Thesis title**: "Explainable AI via Bayesian Learning"
  Advised by Helen Hastie and Arash Eshghi, Heriot-Watt University
- **Schlumberger Cambridge Research Scholarship**, selected as one of the International Ph.D. participants
  for an industry fully sponsored studentship, based on leadership potential and academic success.

University of Aberdeen, Aberdeen　　　　　　　　　　　　　Sep. 2017 - Aug. 2018
M.Sc. in Artificial Intelligence　　　　　　　　　　　　　　　　Aberdeen, UK

- **Thesis title**: "Well Performance Analysis A prototype for Time-Series Forecasting"
  Advised by Wei Pang and Sander Mos (Adv. Data Analytics Chevron).
- **Coursework**: Machine Learning, Data Mining and Visualisation, Natural Language Generation, Knowledge
  Representation and Reasoning, Software Agents and Multi-Agent Systems
- **The Data Lab MSc programme**, selected as one of the 90 M.Sc. students for a sponsored studentship for achieving
  analytical and technical skills for solving real life organisational problems and challenges, required by a broad range
  of Scottish industry sectors

Constanta Maritime University　　　　　　　　　　　　　　　Oct. 2014 - Jul. 2016
M.Sc. in Marine Engineering and Navigation　　　　　　　　　　Constanta, Romania

- **Thesis title**: "Corossion risk of the offshore structures in the Black Sea Environment", supervised by Zgan Remus.

University Politehnica of Bucharest　　　　　　　　　　　　0ct. 2010 - Jul. 2014
B.Sc. in Mechatronics and Robotics　　　　　　　　　　　　　Bucharest, Romania

- **Thesis title**: "Kinematic and dynamic study of humanoid robots", supervised by Spânu Alina.
- **Coursework**: Robotics Software for Mechatronic Systems, Artificial Intelligence, Numerical Methods, Mathematical
  Analysis, Micro and Nano Technologies, Hydraulics and pneumatics, Basic Elements of an Automated Systems
- **Abroad**: Selected for Erasmus Exchange Programme at New University of Lisbon, Lisbon, Portugal (Fall 2013).

EXPERIENCE

TeamSolve　　　　　　　　　　　　　　　　　　　　　　Sept. 2023 - Sept. 2024
AI and Data Science Engineer　　　　　　　　　　　　　　　　remote

- Exploring how Lily, an Operation & Maintenance (O&M) AI Assistant, can provide invaluable insights and guidance,
  for complex maintenance questions.
- Designing, developing, and implementing machine learning systems specifically tailored for the chatbot, Lily.
- Evaluating large language models based on specific natural language generation tasks, such as summarisation,
  simplification and dialogue

Schlumberger Cambridge Research Jun. 2021 - Oct. 2021
Research Intern Cambridge, UK

- Designed an interface in Python, to build trust and increase the transparency of Bayesian Networks via Natural Language explanations and visualisation techniques
- Developed an experiment that help us to improve the users experience, by creating good Natural Language explanations and infographics for an industrial setting
- Presented my work at Explainable AI, Caltech Virtual Workshop and at Schlumberger Machine Learning and AI Symposium.
- Delivered an engaging remote workshop about Explainable AI and Bayesian Networks for nearly 70 participants

Chevron Jun. 2018 - Aug. 2018
Data Science Intern Aberdeen, UK

- Developing a prototype for predicting the performance of the oil and gas reservoir management, by combining an LSTM model with Symbolic Aggregate Approximation modeling (SAX-LSTM)

ArcelorMittal Feb. 2015 - Feb. 2016
Maintenance Planning Engineer Galati, Romania

- Coordinating resources and ensuring timely execution of plant operations
- Planning and scheduling preventive and routine maintenance programs

PROJECTS

"BigScience" research workshop

- Collaborated as a part of the Big Science Evaluation Working Group, for providing clear definitions and good evaluation techniques for bias and fairness in NLP Systems, by participating actively in discussions

GEM benchmark

- Collaborated as a part of the GEM Evaluation team to select evaluation criteria for Natural Language Generation (NLG) tasks, such as summarisation, data-to-text, simplification and dialogue
- Designed survey instruments for human evaluation of NLG tasks, by using Bootstrap, Python and JavaScript and verified the reliability agreement of human annotators using statistical measures through a Python script
- Created Data Cards for the DART dataset for the GEM Benchmark and assured if the code structure, preprocessing primitives and baselines uniformity

TEACHING EXPERIENCE

Learning Facilitator for Designing and Building AI Products and Services 2022 - Present
MIT xPRO Remote

Learning Facilitator for Machine Learning and Artificial Intelligence 2022 - Present
Carnegie Mellon University - Executive Education Remote

Teaching Assistant for Data Mining and Exploration Spring 2020
School of Informatics, University of Edinburgh Edinburgh, UK

SDP Expert for System Design Project Spring 2020
School of Informatics, University of Edinburgh Edinburgh, UK

Demonstrator for Software Development 1 (Java) Fall 2019
Mathematics and Computer Science, Heriot-Watt University Edinburgh, UK

Demonstrator for Data Mining and Exploration
School of Informatics, University of Edinburgh

Spring 2019
Edinburgh, UK

Demonstrator for Introduction to Vision and Robotics
School of Informatics, University of Edinburgh

Fall 2018
Edinburgh, UK

SELECTED PUBLICATIONS

See Google Scholar or Semantic Scholar for a complete list of preprints.

2023

- **A Needle in a Haystack: An Analysis of High-Agreement Workers on MTurk for Summarization**
  Lining Zhang, Simon Mille, Yufang Hou, Daniel Deutsch, Elizabeth Clark, Yixin Liu, Saad Mahamood, Sebastian Gehrmann, Miruna Clinciu, Khyathi Raghavi Chandu, João Sedoc
  In Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers).
  [pdf]

- **Barriers and enabling factors for error analysis in NLG research**
  Emiel Van Miltenburg, Miruna Clinciu, Ondej Duek, Dimitra Gkatzia, Stephanie Inglis, Leo Leppänen, Saad Mahamood, Stephanie Schoch, Craig Thomson, Luou Wen
  In Northern European Journal of Language Technology. [pdf]

2022

- **Bloom: A 176b-parameter open-access multilingual language model**
  TL Scao, A Fan, C Akiki, E Pavlick, S Ili, D Hesslow, R Castagné, ... [pdf]

- **You reap what you sow: On the Challenges of Bias Evaluation Under Multilingual Settings**
  Zeerak Talat, Aurélie Névéol, Stella Biderman, Miruna Clinciu, Manan Dey, Shayne Longpre, Sasha Luccioni, Maraim Masoud, Margaret Mitchell, Dragomir Radev, Shanya Sharma, Arjun Subramonian, Jaesung Tae, Samson Tan, Deepak Tunuguntla, Oskar Van Der Wal
  In Proceedings of BigScience Episode 5 – Workshop on Challenges & Perspectives in Creating Large Language Models, pages 2641, virtual+Dublin. Association for Computational Linguistics. [pdf]

- **Emergent Structures and Training Dynamics in Large Language Models**
  Ryan Teehan, Miruna Clinciu, Oleg Serikov, Eliza Szczechla, Natasha Seelam, Shachar Mirkin, Aaron Gokaslan
  In Proceedings of BigScience Episode 5 Workshop on Challenges & Perspectives in Creating Large Language Models, pages 146-159, virtual+Dublin. Association for Computational Linguistics.) [pdf]

2021

- **Underreporting of errors in NLG output, and what to do about it**
  Emiel van Miltenburg, Miruna Adriana Clinciu, Ondrej Dusek, Dimitra Gkatzia, Stephanie Inglis, Leo Leppanen, Saad Mahamood, Emma Sophia Manning, S. Schoch, Craig Thomson, Luou Wen
  In Proceedings of the 16th Conference of the European Chapter of the Association for Computational Linguistics: Main Volume (EACL), 2021.(**Commendation for best position paper**) [pdf]

- **A Study of Automatic Metrics for the Evaluation of Natural Language Explanations**
  Miruna Adriana Clinciu, Arash Eshghi, H. Hastie
  In Proceedings of the 14th International Conference on Natural Language Generation (INLG), 2021. [pdf]

- **Its Common Sense, isnt it? Demystifying Human Evaluations in Commonsense-enhanced NLG systems**
  Miruna Clinciu*, Dimitra Gkatzia* and Saad Mahamood*
  In Proceedings of the Workshop on Human Evaluation of NLP Systems (HumEval, EACL), 2021. [pdf]

2020

- **Twenty Years of Confusion in Human Evaluation: NLG Needs Evaluation Sheets and Standardised Definition**
  David Howcroft, Anya Belz, Miruna Clinciu, Dimitra Gkatzia, Sadid A. Hasan, Saad Mahamood, Simon Mille, Emiel van Miltenburg, Sashank Santhanam, and Verena Rieser
  In Proceedings of the 13th International Conference on Natural Language Generation (INLG), 2020. [pdf]

- **Let's Evaluate Explanations!**
  Miruna-Adriana Clinciu and Helen Hastie
  In Proceedings of HRI 2020 Workshop on Test Methods and Metrics for Effective HRI in Real World Human-Robot Teams (Extended Abstract), 2020. [pdf]

  2019

- **A Survey of Explainable AI Terminology**
  Miruna-Adriana Clinciu and Helen Hastie
  In Proceedings of the 1st Workshop on Interactive Natural Language Technology for Explainable Artificial Intelligence (NL4XAI, INLG), 2019. [pdf]

Skills

*** Proficient ** Intermediate * Learning

Programming Languages : Python***, C++**, Java*, JS / HTML / CSS*, PDDL*
"Human" Languages : English***, Romanian (native), French*, Japanese*
Interests: : I spend my free time painting or drawing. Sometimes I enjoy exploring the local hidden gems.