

Rares Dolga

Computer Science student ranked third in class and PhD candidate focused on probabilistic machine learning, specialising in efficient long sequence generation. Seeking opportunities in machine learning and quantitative research.

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Website: <https://raresdolga.github.io/>

EDUCATION

University College London Foundational AI CDT MPhil/PhD. Candidate	Oct 2023 - Present, London UK
<ul style="list-style-type: none">NLP research for efficient long sequence learning using probabilistic machine learning techniques.	
University College London <i>Bachelors & Master degree in Computer Science</i>	Sep 2016 - Jun 2020, London UK
<ul style="list-style-type: none">Average Degree 87%: Intro to Deep Learning(99%), Graphical Models(93%), Information Retrieval(94%), Statistical NLP (86%), Multi Agent AI(85%), Data Mining(84%)	
National College “Moise Nicoara”	Sep 2012 - Jun 2016, Arad RO
<ul style="list-style-type: none">Romanian Baccalaureate (out of 10): Mathematics 9.95, Computer Science 10	

WORK EXPERIENCE

UIPath AI Scientist Intern (Part-time)	Mar 2024 – Present, London UK
<ul style="list-style-type: none">Creating efficient models for long sequences	
J.P. Morgan AI Researcher	Apr 2022 – Sep 2023, London UK
<ul style="list-style-type: none">Leading NLP research in finance, on documents and long text sequences. Financial and operations automation.Paper under review SEIP 2023. SAM: Smart Actionable Monitoring for software applications	
J.P. Morgan Quantitative Developer	Sep 2020 – Apr 2022, London UK
<ul style="list-style-type: none">Data Analytics team, implementing scalable time series databases and quantitative pricing models.Built unified access to real-time and historical pricing data distributed on multiple machines. Provided different views and statistics of the raw dataset. (KDB+/Q, Python)	
J.P. Morgan Technology Summer Analyst	June 2019 - Sep 2019, London UK
<ul style="list-style-type: none">Worked as Java backend developer in the Algorithmic Trading team - software for monitoring apps	
RegulAltion Intern	Jun 2018 - Sep 2018, London UK
<ul style="list-style-type: none">Java backend programmer developing software to support FinTech companies with regulatory registration	

PROJECTS/RESEARCH

[RotRNN: Modelling Long Sequences with Rotations](#)

- Next Generation of Sequence Modeling Architectures Workshop at ICML 2024

[Latent Attention for Linear Time Transformers](#)

- Next Generation of Sequence Modeling Architectures Workshop at ICML 2024

[Machine Executable Contracts with Deep Learning](#)

- 2020 International Conference on Computational Science and Computational Intelligence, Las Vegas.

[Tax-DP: A fully sharded data parallel trainer in Jax](#)

TEACHING

COMP0080: Graphical Models, University College London	Oct 2023 - Dec 2023, London UK
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TECHNICAL SKILLS AND COMPETENCIES

- Technologies:** Python, Pytorch, Spacy, Q/KDB+, Java, C/C++, Linux, Git, ECDL
- Other Skills:** Adaptable to multicultural environments, Team spirit, Good communication, Leadership
- Languages:** Fluent in English, Native Romanian speaker

INTERESTS AND ACHIEVEMENTS

Awards **2014 - 2020**

- “Ambassador’s Diploma” award - for the best Romanian Student in the UK during the 2018-2019 academic year
- UCL and British Computer Science award - for client consulting and applied software development
- 2nd Place out of 30 people, Computer Science C/C++ Regional Contest-Optimization
- 4th Place out of 40 people, “Traian Lalescu” Intercounty Mathematics Olympiad

Organisations and Activities

- Microsoft Student Partner (2017-2019) - Gaining leadership experience by organising hackathons and talks