

RALPH ABBOD CV

E ralph@alphabb.ai

P +44 7 429925971

N Lebanese | New Zealander

Work Experience

| | |
|---|----------------|
| Science Associate, Learning Engineering (Full-time). <i>Schmidt Futures</i> Providing technical and strategic advice in AI, developing research models. | 2023 - Present |
| AI Advisor (Part-time). <i>The Learning Agency Lab</i> Advising on technical competition design and implementation. | 2023 - Present |
| AI Developer (Part-time). <i>The Learning Agency Lab</i> Developing and evaluating language models for automated writing feedback. | 2021 - 2023 |
| Visiting Scientist (Part-time), LabGPT project. <i>Francis Crick Institute</i> | 2023 |
| AI Advisor (Part-time). <i>Schmidt Futures (Learning Engineering)</i> | 2022 - 2023 |

Teaching Experience

| | |
|---|-------------|
| Tutor, Graph Representation Learning. <i>Stanford House and Hertford College, Oxford</i> | 2022 |
| Practical Demonstrator, Advanced Topics in Machine Learning. <i>University of Oxford</i> | 2021 - 2022 |
| Tutor, Probability and Computing. <i>University of Oxford</i> | 2019 |

Education

| | |
|---|-------------|
| DPhil in Computer Science. <i>University of Oxford.</i> Supervisors: Dr. İsmail İlkan Ceylan and Prof. Thomas Lukasiewicz | 2018 - 2022 |
| MSc in Computer Science. <i>University of Oxford</i> Coursework Grade: 81.17 / 100, Dissertation Grade: 85 / 100, Distinction. | 2017 - 2018 |
| B.E. in Computer Engineering. <i>Lebanese American University (LAU)</i> GPA: 3.99 / 4.00, High Distinction. Minor in Mathematics. | 2013 - 2017 |

Awards and Honors

| | |
|---|-------------|
| Highlighted Reviewer at ICML (Top 10%) and ICLR (Top 9%). | 2022 |
| G-Research PhD Prize (First Place) in Maths and Data Science. <i>G-Research</i> | 2022 |
| Global Talent Visa (Exceptional Talent). <i>UK Home Office, Tech Nation.</i> | 2022 |
| Best Student Paper Runner-up Award. <i>KR 2020</i> | 2020 |
| Departmental Teaching Award. <i>Department of Computer Science, Oxford</i> | 2019 |
| Jesus College Graduate Scholarship. <i>Jesus College, Oxford</i> | 2019 - 2022 |
| Hult Prize London Regional Final Winner. <i>Hult Prize Foundation</i> | 2019 |
| Alun Hughes Graduate Scholarship. <i>Jesus College, Oxford</i> | 2018 - 2021 |
| Oxford - DeepMind Graduate Scholarship. <i>University of Oxford and DeepMind</i> | 2018 - 2021 |
| President's Award and Computer Engineering Award (First Place). <i>LAU</i> | 2017 |
| Best Engineering Capstone Project Poster Award. <i>LAU</i> | 2017 |
| Merit Scholarship. <i>LAU</i> | 2013 - 2017 |

Skills

Programming. Python (TensorFlow, PyTorch, PyTorch Geometric), Java, JavaScript (D3.js)
Experience with developing Graph Neural Network (GNN) models and visualizations.

Languages. Fluent in English, Arabic, and French.

Music. Baccalaureate Diploma in Piano Performance, Distinction "Very Good"
Obtained from the Lebanese National Higher Conservatory of Music (LNHCM) in June 2017.

Selected Publications

- R. Abboud**, R. Dimitrov, and İ. İ. Ceylan. Shortest Path Networks for Graph Property Prediction LoG 2022 (Spotlight Paper)
- R. Abboud**, İ. İ. Ceylan and R. Dimitrov. Approximate Weighted Model Integration on DNF Structures AIJ, 2022
- J. Messner, **R. Abboud** and İ. İ. Ceylan. Temporal Knowledge Graph Completion Using Box Embeddings. AAAI 2022
- R. Abboud**, İ. İ. Ceylan, M. Grohe and T. Lukasiewicz. The Surprising Power of Graph Neural Networks with Random Node Initialization IJCAI 2021
- R. Abboud**, İ. İ. Ceylan, T. Lukasiewicz and T. Salvatori. BoxE: A Box Embedding Model for Knowledge Base Completion NeurIPS 2020 (Spotlight Paper)
- R. Abboud**, İ. İ. Ceylan and R. Dimitrov. On the Approximability of Weighted Model Integration on DNF Structures KR 2020
- R. Abboud**, İ. İ. Ceylan and T. Lukasiewicz. Learning to Reason: Leveraging Neural Networks for Approximate DNF Counting AAAI 2020
- R. Abboud** and J. Tekli. Integration of nonparametric fuzzy classification with an evolutionary developmental framework to perform music sentiment-based analysis and composition Soft Computing, 2020

Selected Talks

- Applying Box Embeddings to Knowledge Bases.** *University of California, Los Angeles.* 2021
- AI For Reasoning.** *Kellogg College, Oxford* 2019
- Programs Creating Other Programs: Intro to Program Synthesis.** *LAU* 2018

Additional Activities

- Project Leader.** DeepSaber. *Oxford Artificial Intelligence Society (OxAI)* 2018 - 2019
Automatic AI level generator for the BeatSaber Virtual Reality (VR) game.
- Student Representative.** *Department of Computer Science, Oxford.* 2017 - 2022

Professional Service

Program Committee member for IJCAI (2021- Present), AAAI (2021 - Present), NeurIPS (2021 - Present), ICLR (2022 - Present), ICML (2022 - Present), LoG (2022 - Present) and TMLR (2022)