RALPH ABBOUD CV

E ralph@ralphabb.ai N Lebanese | New Zealander

Work Experience

Program Scientist. *Renaissance Philanthropy* 2025 - Present
Providing technical leadership for the AI for Math (AI For Math Fund) and AI for Education programs (Tutoring Arena, Learning Engineering Virtual Institute).

Program Scientist. *Learning Engineering Virtual Institute (LEVI)* 2024 - 2025
Supported LEVI operations and provided strategic and technical guidance to grantees. This role has been migrated into my current responsibilities at Renaissance Philanthropy.

Science Associate, Learning Engineering. *Schmidt Futures* 2023 - 2024
Primarily worked on LEVI while it was initially housed at Schmidt Futures.

Advisory Roles

Jackfruit Finance 2025
Developed classical machine learning solutions to support credit decision making.

LAPIS 2025
Trained in-house engineering team and supported their development of the Lalah tutoring chatbot in Afghanistan.

The Learning Agency 2021 - 2024
Evaluated models for the Feedback Prize competition series. Supported the design process for private competitions, including metrics, data splits, and implementation decisions.

LabGPT, Francis Crick Institute 2023
Worked on biochemistry protocol generation using large language models (LLMs). Work led to BioPlanner (EMNLP 2023).

Schmidt Futures 2022 - 2023
Supported LEVI grantees with machine learning model development.

Education

DPhil in Computer Science. *University of Oxford.* 2018 - 2022
Thesis Title: Learning and Inference over Relational Data.

MSc in Computer Science. *University of Oxford* 2017 - 2018
Coursework Grade: 81.17 / 100, Dissertation Grade: 85 / 100, Distinction.

B.E. in Computer Engineering. *Lebanese American University (LAU)* 2013 - 2017
GPA: 3.99 / 4.00, High Distinction. Minor in Mathematics.

Skills

Program Operations. Project Management, Technical Reviewing, Proposal Selection

Machine Learning. PyTorch, TensorFlow, PyG, DGL, OGB, HuggingFace, OpenAI, Gemini APIs.

Programming. Python, Java, JavaScript (D3.js, Google Apps Scripts)

Languages. Fluent in English, Arabic and French. Intermediate in Italian.

Music. Baccalaureate in Piano Performance (2017) from the Lebanese National Conservatory

Awards and Honors

Top Reviewer Awards. ICML 2025, LoG 2023, NeurIPS 2023, ICML 2022, ICLR 2022 — 2022 - 2025

G-Research PhD Prize (First Place) in Maths and Data Science. *G-Research* — 2022

Global Talent Visa (Exceptional Talent). *UK Home Office, Tech Nation.* — 2022

Best Student Paper Runner-up Award for Weighted model integration paper. *KR 2020* — 2020

Jesus College Graduate Scholarship. *Jesus College, Oxford* — 2019 - 2022

Alun Hughes Graduate Scholarship. *Jesus College, Oxford* — 2018 - 2021

Oxford – DeepMind Graduate Scholarship. *University of Oxford and DeepMind* — 2018 - 2021

President's Award, Computer Engineering Award, and Best Capstone Project. *LAU* — 2017

Merit Scholarship. *LAU* — 2013 - 2017

Selected Publications

Improving Open-Response Assessment with LearnLM — AIED 2025
D. Thomas, C. Borchers, S. Bhushan, S. Kakarla, A. Houk, *R. Abboud*, S. Gupta, E. Gatz, K. Koedinger

BioPlanner: Automatic Evaluation of LLMs on Protocol Planning in Biology — EMNLP 2023
O. O'Donoghue, A. Shtedritski, J. Ginger*, R. Abboud*, A. Ghareeb, J. Booth, and S. Rodriques

PlanE: Representation Learning over Planar Graphs — NeurIPS 2023
R. Dimitrov, Z. Zhao, *R. Abboud*, and İ. İ. Ceylan

Shortest Path Networks for Graph Property Prediction — LoG 2022 (Spotlight)
R. Abboud, R. Dimitrov, and İ. İ. Ceylan

Approximate Weighted Model Integration on DNF Structures — AIJ, 2022
R. Abboud, İ. İ. Ceylan, and R. Dimitrov

Temporal Knowledge Graph Completion Using Box Embeddings — AAAI 2022
J. Messner, *R. Abboud*, and İ. İ. Ceylan

The Surprising Power of Graph Neural Networks with Random Node Initialization — IJCAI 2021
R. Abboud, İ. İ. Ceylan, M. Grohe, and T. Lukasiewicz

BoxE: A Box Embedding Model for Knowledge Base Completion — NeurIPS 2020 (Spotlight)
R. Abboud, İ. İ. Ceylan, T. Lukasiewicz, and T. Salvatori

On the Approximability of Weighted Model Integration on DNF Structures — KR 2020
R. Abboud, İ. İ. Ceylan, and R. Dimitrov

Learning to Reason: Leveraging Neural Networks for Approximate DNF Counting — AAAI 2020
R. Abboud, İ. İ. Ceylan, and T. Lukasiewicz

Professional Service

Program Committee member at IJCAI (2021- Present), AAAI (2021 - Present), NeurIPS (2021 - Present), ICLR (2022 - Present), ICML (2022 - Present), LoG (2022 - Present), COLM (2024 – Present) and TMLR (2022).