

RYAN REESE

<Email> | <GitHub> | <LinkedIn>

PROFESSIONAL/RESEARCH POSITIONS

NVIDIA Ltd. <i>Solutions Architect</i>	Jan 2026 – present United Kingdom
Imperial College London <i>MSc in Digital Chemistry with AI and Automation</i> Supervisors: Prof. Alex Ganose and Prof. Charles Romain. Thesis: <i>Computational Foundations to Assess Chemical Recyclability.</i>	Oct 2024 – Sep 2025 United Kingdom
University of Hong Kong <i>BSc in Chemistry; minors in Mathematics and Computer Science</i> Overseas Research Fellowship Scheme (Jun–Aug 2023). Supervisor: Prof. Sophia Yaliraki, Imperial College London. Thesis: <i>A Streamlined Method to Compute and Visualise Markov Communities in Biomolecules.</i> Best Presenter, HKU Research Colloquium of Undergraduate Research, 2023. Undergraduate Research Assistant (Aug–Dec 2022). Supervisor: Prof. Jun Yang, University of Hong Kong. Research topic: electronic structure theory. Summer Research Fellowship Scheme (Jun–Aug 2021). Supervisor: Prof. Yufeng Wang, University of Hong Kong. Thesis: <i>Synthesis of Patchy Particles via Emulsion-Based Extraction.</i> Best Presenter, HKU Research Colloquium of Undergraduate Research, 2021.	Sep 2020 – Aug 2024 Hong Kong

SOFTWARE

NVIDIA ALCHEMI Toolkit and Toolkit-Ops <i>GPU-accelerated atomistic simulation tools. <Toolkit> <Toolkit-Ops></i>	Contributor Software; Validation
TROPIC — Thermodynamics of Ring-Opening Polymerisation Informatics Collection <i>Thermodynamic data for ring-opening polymerisation. <GitHub> <Paper></i>	Co-author Software; Data curation; Visualization
VMC — Visualise Markov Communities <i>Protein Markov-community visualisation in PyMOL. <GitHub></i>	Author Software; Visualization

PUBLICATIONS

R. M. R. Reese, A. M. Ganose and C. Romain. “Thermodynamics of Ring-Opening Polymerisation Informatics Collection (TROPIC): a database to enable polymer chemical recycling.” *Faraday Discussions* **262**, 455–477 (2026). <Paper>

PRESENTATIONS

Proprietary presentations are excluded from this list.

From Pattern Recognition to Physics: Building the AI Stack for Materials Discovery <i>Invited speaker, Dunia Innovations’ Discovery Day</i>	19 May 2026 Berlin, Germany
LaREST: Lactone Ring-opening Energetics Sorting Tool <i>Poster presentation, Polymerisation and depolymerisation chemistry: the second century Faraday Discussion</i>	8–10 Sep 2025 Oxford, UK
A Streamlined Method to Compute and Visualise Markov Communities in Biomolecules <i>Research Colloquium of Undergraduate Research, University of Hong Kong</i>	Oct 2023 Hong Kong
Synthesis of Patchy Particles via Emulsion-Based Extraction <i>Research Colloquium of Undergraduate Research, University of Hong Kong</i>	Oct 2021 Hong Kong

TEACHING MATERIALS

NVIDIA ALCHEMI tutorials

Co-author · 2026

Molecular adsorption screening and melting-point determination. <GitHub>

Materials used at Machine Learning in Chemical and Materials Sciences 2026 (MLCM-26; adsorption tutorial) and AI4X–Accelerate 2026.

Chemistry video lectures

Creator · 2019

Public chemistry tutorials. <YouTube>

OTHER REFEREEING

NVIDIA Academic Grant Program

2026

Technical reviewer, Simulation & Modeling

SERVICE TO THE SCIENTIFIC COMMUNITY

IDRIS Open Hackathon

May 2026

Technical mentor, DIRAC team

Orsay, France

Mistral Worldwide Hackathon — Paris edition

28 Feb – 1 Mar 2026

Mentor and judge

Paris, France

HONOURS AND AWARDS

- Imperial College Trust Conference Grant, Imperial College London, Jun 2025 (Polymerisation and depolymerisation chemistry: the second century Faraday Discussion).
- Best presenter, HKU Research Colloquium of Undergraduate Research, Overseas Research Fellowship Scheme, 2023.
- The CI Stapleton Scholarship, University of Hong Kong, 2023.
- Dean's Honours List, University of Hong Kong, 2022–2023.
- Stanley Chu and Annie Chow Scholarship in Student Enrichment, University of Hong Kong, 2022–2023.
- Research grant supporting the overseas fellowship, 2023.
- Best presenter, HKU Research Colloquium of Undergraduate Research, Summer Research Fellowship Scheme, 2021.
- Chairman's Award for Excellence, English Schools Foundation, Aug 2020.
- Gold Certificate, UKMT Junior Mathematical Challenge, 2015.

MEMBERSHIPS / AFFILIATIONS

Associate Member of the Royal Society of Chemistry.