

Day 1:	NZRSE 2025 Day 1
8:45 AM	Welcome
9:00 AM	Keynote 1: Mr. Nick Jones
10:00AM - 11:00AM	Session 1: (3 presentations) Chair: Nisha Ghatak
10:00AM - 10:20AM	Presentation 1: Programming Principles in a High Performance Computing Environment - Lev Lafayette - University of Melbourne
10:20AM - 10:40AM	Presentation 2: Software Architecture for Big Data - Patricia Haden - University of Otago
10:40AM - 11:00AM	Presentation 3: VSCoDe on the node - Dan Tosello - University of Melbourne
11:00AM - 11:10AM	Break
11:10AM - 1:10PM	Session 2: (1 BOF, 3 presentations) Chair: Wolfgang Hayek
11:10 AM -12:10 PM	Birds of a Feather Session: Beyond Beginner: Building Software Engineering Skills for Researchers - Murray Cadzow (University of Otago), Rina Hannaford (Bioeconomy Science Institute), Chris Scott (University of Auckland) and Nisha Ghatak (REANNZ)
12:10PM -12:30PM	Presentation 4: Institutional Policy Pathways for Supporting Research Software: Global Trends, Local Actions - Michelle Barker and Richard Littauer - Research Software Alliance
12:30PM - 12:50PM	Presentation 5: Deveopment and Validation of an Algorithm for Predicting HbA1c from Continuous Glucose Monitoring Data - Arindam Basu - University of Canterbury
12:50PM - 1:10PM	Presentation 6: REDMANE: A Lightweight Ecosystem for Research Data Management Across Organisations and Diverse Data Types - Rowland Mosbergen - WEHI
1:10PM - 1:55PM	Lunch
1:55PM - 2:55PM	Session 3: (3 presentations) Chair: Rina Hannaford
1:55PM - 2:15PM	Presentation 7: The Impact of Large Language Models and Agentic Development on eResearch - Alexander Pletzer (ESNZ/REANNZ), Jun Huh (University of Auckland) and Georgina Rae (REANNZ)
2:15PM - 2:35PM	Presentation 8: Integrating AI Models and Agents into Research Software - Nick Snellgrove, Philipp Bayer, Michael Bunce, Dirk Pfeiffer and Petra Muellner - EPI
2:35PM - 2:55PM	Presentation 9: A Whirlwind Tour of Cascade and Rapids - Wolfgang Hayek - Earth Sciences New Zealand
2:55PM - 3:05PM	Break
3:05PM - 3:35PM	Session 4: (3 lightning talks, 1 panel discussion, 2 presentations) Chair: Chris Scott
3:05PM - 3:15PM	Lightning talk 1: Interactive maps of nerve-organ anatomy and function on the SPARC Portal - Alan Wu - Auckland Bioengineering Institute
3:15PM - 3:25PM	Lightning talk 2: Bridging the computing gap in marine research with imagery annotation software - Caroline Chin - Earth Sciences New Zealand
3:25PM - 3:35PM	Lightning talk 3: CellML - Model Exchange Format for FAIR DAE models - Hugh Sorby - Auckland Bioengineering Institute
3:35PM - 4:05PM	Panel discussion: Generative AI for research - Jannat Maqbool - AI Researchers Association
4:05PM - 4:25PM	Presentation 10: Ollama-RAG: experiences implementing a RAG-LLM chatbot for researchers - Brent Martin - Manaaki Whenua - Landcare Research Group, Bioeconomy Science Institute
4:25PM - 4:45PM	Presentation 11: RUMBLE: A Containerised Machine Learning Platform for Hunting Submarine Mass Movements in OBS Data - Christof Mueller, Suzanne Bull, and Yannik Behr - Earth Sciences New Zealand
	Closing - Day 1
4:45 PM	Day 1 ends

Day 2:	NZRSE 2025 Day 2
9:00 AM	Opening of Day 2
9:05 AM	Keynote 2: Dr. Emily Kahl
10:05AM - 10:45AM	Session 5: (2 presentations) Chair: Murray Cadzow
10:05AM - 10:25AM	Presentation 12: Shaping the Future of Scientific Software with AI - Florent Aden-Antoniow, Yuntian Liu, Rob Buxton and Christof Mueller - Earth Sciences New Zealand
10:25AM - 10:45AM	Presentation 13: Automating the Evaluation of Forensic Evidence - Janet Stacey, James Curran and SallyAnn Harbison - Public Health and Forensic Science
10:45AM - 10:55AM	Break
10:55AM - 12:35PM	Session 6: (4 lightning, 3 presentations) Chair: Brent Martin
10:55AM - 11:05AM	Lightning talk 4: PyEarthTools: Lowering the Barrier to Machine Learning in Earth Science - Maxime Rio, Tennessee Leeuwenburg and Gemma Mason - Earth Sciences New Zealand
11:05AM - 11:15AM	Lightning talk 5: Bringing Together Research Developed Software and Software Engineering Principles - Hugh Sorby - Auckland Bioengineering Institute
11:15AM - 11:25AM	Lightning talk 6: Build It and They Will Come: A Story of the 'Leiden' R Package - Tom Kelly - RIKEN (Yokohama)
11:25AM - 11:35AM	Lightning talk 7: From Science to Operation within the Rapid Characterisation of Earthquake and Tsunami (RCET) Program - Jen Andrews, Florent Aden, Yannik Behr, Emmanuel Caballero-Leyva, Calum Chamberlain, Elisabetta D'Anastasio, Bill Fry, Anna Kaiser, Ciaran King, Christof Mueller, Emily Warren-Smith, Duncan White and Chris Zweck - Earth Sciences New Zealand
11:35AM - 11:55AM	Presentation 14: Simple Tools, "Quick" Wins and Big Gains - Maxime Rio - Earth Sciences New Zealand
11:55AM - 12:15PM	Presentation 15: The Deployment of a Radio Astronomy Software on HPC Using Container Technology - Paulus Lahur - CSIRO
12:15PM - 12:35PM	Presentation 16: Virtual Drug Screening With AI - Chris Scott, Shanan Chand, Jack Copping, Dinindu Senanayake, Nick Jones, and Jack Flanagan - University of Auckland
12:35AM - 1:20PM	Lunch
1:20PM - 3:20PM	Session 7: (1 BOF, 3 presentations) Chair: Janet Stacey
1:20PM - 2:20PM	Birds of a Feather Session: Making space: Celebrating People and Diversity in Research Software - Jana Makar (Women in HPC Australasia Chapter), Alexandra Gossart (Victoria University of Wellington), Maryam Tayebi (Mātai Medical Research Institute)
2:20PM - 2:40PM	Presentation 17: Unlocking Urban and Regional Insights: AURIN's Data-Driven eResearch Infrastructure for Climate, Energy, and Housing Challenges - Jannat Maqbool and Aaron Magri
2:40PM - 3:00PM	Presentation 18: CSET, a Powerful, Flexible, Process-Oriented Evaluation Toolkit for Convective and Turbulent Scale Weather and Climate Models - Jorge Bornemann (ESNZ), Sylvia I Bohnenstengel (Met Office UK), James Frost (Met Office UK), James Warner (Met Office UK), David Flack (Met Office UK), John Edwards (Met Office UK)
3:00PM - 3:20PM	Presentation 19: Scaling Materials Discovery with HPC and AI - Bushra Anamn - University of Canterbury
3:20PM - 3:30PM	Closing Remarks
3:30 PM	Day 2 ends