

Trained researcher with broad experience in data driven research and teaching and training. Seeking to diversify my coding experience, and apply my data skills to new questions in a more varied and client facing environment.

I Skills

Research and Data Analysis

Through doctoral studies at Newcastle University I trained in advanced quantitative methods. I have extensive data experience in R, applying regression models (including GAMMs) to language data to answer complex research questions, as reflected in my thesis and multiple peer-reviewed publications. Throughout my academic roles at both Newcastle and Manchester Metropolitan Universities, I have not only cleaned, processed, and modelled data using sophisticated scripting methods, but also kept on top of emerging software and techniques in the field and assessed the suitability for various research challenges.

Teaching and Training

I bring over five years of experience in higher education, having crafted and delivered lectures, seminars, and workshops at an undergraduate level and designed and run a postgraduate level module in research methods and quantitative analysis using R. My role as a lab manager at Newcastle University included one-to-one and group mentoring, where I advised and supported students and staff in experimental and statistical methods and my roles at both Newcastle and Manchester Metropolitan University have involved training and supervising research assistants where I have communicated complex technical concepts to students including transferring skills that they could take forwards into their own ongoing work.

Communication

Effective communication has been central to my career both in academia and beyond. I have presented complex research findings at institutional and international conferences to mixed audiences, ensuring clarity, whether addressing specialists or broader stakeholders. In addition, my roles outside of research - such as managing communications for a start-up school and coordinating volunteer teams as a music administrator - have refined my ability to communicate detail with clarity and efficiency.

I Education

- 2018–2023 ○ **PhD Linguistics**, *Newcastle University*, Newcastle upon Tyne
- 2017–2018 ○ **MA Applied Linguistics Research**, *Newcastle University*, Newcastle upon Tyne, *Distinction*
- 2014–2017 ○ **BA Linguistics**, *Newcastle University*, Newcastle upon Tyne

I Experience

- 2024–present ○ **Research Associate**, *Manchester Metropolitan University*, Manchester
Responsible for managing, processing, and analysing sound data from the Manchester Voices Project. Contributed to a public facing research book and first authored two academic papers. Also supported research efforts in another parts of the department.
- 2023–2024 ○ **Associate Lecturer**, *Newcastle University*, Newcastle upon Tyne, Preparing and delivering lectures, seminars, and workshops to undergraduate students
- 2018–2024 ○ **Postgraduate Tutor**, *Newcastle University*, Newcastle upon Tyne, Preparing and delivering lectures, seminars, and workshops to undergraduate and postgraduate students
- 2023–2024 ○ **Music Assistant**, *Jesmond Parish Church*, Newcastle upon Tyne, Volunteer management, email communication, copyright administration, event planning and management
- 2022–2023 ○ **Research Assistant - Linguistics Lab Manager**, *Newcastle University*, Newcastle upon Tyne, Research support, mentoring, and training

Publications

Published

Braber, N., Halfacre, C., and Jansen, S. 2024 'The stability of the TRAP-BATH split in the East Midlands.' *Journal of English Linguistics*, 52(4), pp.275-298. Available at <https://doi.org/10.1177/00754242241286946>

Bochynska, A., Keeble, L., Halfacre, C., Casillas, J.V., Champagne, I-Á., Chen, K., Röthlisberger, M., Buchanan, E.M., and Roettger, T.B. 2023. 'Reproducible research practices and transparency across linguistics.' *Glossa Psycholinguistics*, 2(1) Available at: <https://doi.org/10.5070/G6011239>

Coretta, S. and Many Speech Analyses. (2023) 'Multidimensional Signals and Analytic Flexibility: Estimating Degrees of Freedom in Human-Speech Analyses', *Advances in Methods and Practices in Psychological Science*, 6(3), p. 1-29. Available at: <https://doi.org/10.1177/25152459231162567>.

Halfacre, C. and Khattab, G. (2019) 'North-South dividers in privately educated speakers: a Sociolinguistic study of Received Pronunciation using the FOOT-STRUT and TRAP-BATH distinctions in the North East and South East of England', in *Proceedings of the 19th International Congress of Phonetic Sciences (ICPhS 2019)*, pp. 2665–2669.

Under Review

Halfacre, C. and Drummond, R. In prep. Change in time and change in attitude evidenced by the MOUTH vowel in Greater Manchester. *Journal of Sociolinguistics*

Submitted

Halfacre, C. In prep. Effects of Private Education on the FOOT-STRUT split in the North East of England. *Language Variation and Change*

Skill matrix

					<div><div><div></div><div></div><div></div><div></div><div></div></div>basic knowledge</div>						<div><div><div></div><div></div><div></div><div></div><div></div></div>extensive project experience</div>
					<div><div><div></div><div></div><div></div><div></div><div></div></div>intermediate knowledge with some project experience</div>						<div><div><div></div><div></div><div></div><div></div><div></div></div>deepened expert knowledge</div>
											<div><div><div></div><div></div><div></div><div></div><div></div></div>expert / specialist</div>
					Level						
					Skill						
					Years						
					Comment						
Language:	<div><div><div></div><div></div><div></div><div></div><div></div></div></div>	R				8	skills in data manipulation and data visualisation in the tidyverse, and in statistics including mixed effect modelling and generalised additive mixed modelling. Teaching experience in all of the above.				
	<div><div><div></div><div></div><div></div><div></div><div></div></div></div>	L ^A T _E X				7	produced reports, papers, and presentations in L ^A T _E X				
	<div><div><div></div><div></div><div></div><div></div><div></div></div></div>	Python				1	introductory training, including data analysis				
	<div><div><div></div><div></div><div></div><div></div><div></div></div></div>	HTML:				3	capable of basic html editing				

National Innovation Centre for Data (NICD)
Newcastle University

22nd June 2025

Data Scientist

Dear Members of the search committee

I am excited to attach my CV and application for the role of Data Scientist at the National Innovation Centre for Data. In 2023 I completed a PhD in Linguistics at Newcastle University, and I currently hold a Research Associate role at Manchester Metropolitan University.

I have eight years of experience cleaning, processing and modelling data in R on multiple (BA, MA, PhD, and subsequent projects). I have a self-motivated approach, and a can-do attitude to problem solving and professional development having self-taught the skills for much of my PhD and subsequent work, including transitioning those skills to uses outside of academia. I have applied my data analysis skills to alternative data sets in a voluntary capacity such as a congregational survey for a church trust and a marketing survey for a school start-up project and have recently undertaken independent Python training to broaden my skill set. I am excited to work collaboratively with others in a team and with clients, addressing new questions and challenges and gaining new skills.

I have extensive undergraduate teaching experience and have also designed and run a Masters level research methods module where I trained postgraduate students in the skills required to plan and analysis to answer research questions, including specifically teaching how to write R code for data visualisation and regression modelling. Additionally, I have developed my own training materials for researcher training in specific statistical techniques. In my research support roles and research experience I have trained and supervised undergraduate research assistants in command line programmes and domain specific software, gaining a wide experience of communicating technical concepts to those with little to no previous training. Alongside my formal teaching I have a wide range of experience in presenting and delivering training at a variety of levels of experience, from external stakeholders to experienced academics. These experiences have prepared me to deliver client project reviews, create comprehensive reports, and represent my work and team both internally and externally. This communication experience also extends to written work, having produced peer-reviewed papers and internal reports, with consistent positive feedback, I am well-positioned to produce reports communicating technical information to colleagues and clients.

In all my work I strive for excellence, seeking out opportunities to learn and develop my skills and ensure I am using the most up to date and appropriate analysis techniques for each project. I strive to create a supportive and collaborative working environment, even when colleagues are working on separate projects. For example, at Newcastle University I founded the Linguistics research students writing group, building both peer support and collaborative learning on academic writing and at Manchester Metropolitan University I started the first Research Staff writing group, bringing together isolated staff in different projects and departments. In both my professional and volunteering experience, I have collaborated with teams to understand project goals and the appropriate ways to share those within a team. My lab manager role in 2022 was a shared post where two staff and our line manager worked together to achieve the goals set by the departments invested in the lab. I have planned and executed work to others' deadlines and set mine independently as required by the various projects I have worked on. I understand my own strengths and am able to take on collaborative and leadership roles as appropriate.

I am drawn to both the challenges and opportunities presented by this role. I am eager to turn my skills to client-focused problems and excited to learn from those with such varied backgrounds and expertise.

Yours faithfully,



Caitlin Halfacre