



Autonomy

Quantitative Researcher

We are looking for someone to join our small, friendly team in order to work on exciting research projects aimed at changing economic agendas. We encourage applications from people at any stage in their career, from early career researchers and current PhD students through to veterans of their discipline. What matters most to us are your skills, and your ambition to contribute to change, not merely your credentials.¹ This role is initially as maternity cover, with a view to making it a permanent role beyond this.

We want to hear from a wide range of people with diverse quant skills and backgrounds!

You might be a heterodox quant economist, a master coder looking to flex their skills for good, a ML expert who wants to hack the usual methods of research, or a mathematician who occasionally muses on optimising resource allocation. We want to meet you!

Job summary

Job title: Quantitative researcher

Reports to: Director of the Autonomy Data Unit (ADU) and other team members

Job purpose: To work with Autonomy's policy team and the ADU to produce innovative and agenda-setting quantitative research and proposals.

Ideal candidate: A creative, efficient team-player with programming experience and a strong background in fields that utilise mathematics. You will be comfortable working with diverse

¹ We accept portfolios of work in place of educational attainment, for example. Please see the 'how to apply' section below.

data sets and be able to identify opportunities for new and interesting research questions and projects. You have previously worked as part of a small team and would be excited by the opportunity to work within an organisation researching and advocating for systems change.

Salary: £30,000 per year (pro rata). As a four-day week organisation, all part-time staff get a 25% increase on their salaries each month in order that they also see the benefits. We have consistently raised the salaries of all our staff, year on year.

Hours: 3-4 days per week (24 - 32 hours, depending on what is agreed), with a view to going full-time as soon as conditions allow.

Contract length: 12 months (3 month probation period) with a view to becoming a permanent member of the Autonomy team following maternity cover period.

We welcome applications from outside the UK.

Your duties and responsibilities

The engine room of Autonomy

- ❑ You will be a core team member, working with the ADU to provide quantitative analysis on some of Autonomy's most innovative research and policy projects.
- ❑ You will be working with different members of the Autonomy team - from our comms lead, to our design team, as well as fellow researchers.
- ❑ You will have the freedom and responsibility to develop your understanding of the policy field as well as data-intensive disciplines, in order that you can bring new insights to bear on Autonomy's work.
- ❑ You will also occasionally engage with colleagues from other progressive organisations as part of our collaborative work.
- ❑ You will help produce ambitious new ideas for potential research projects with the rest of the team.
- ❑ You will help steer Autonomy's longer-term research agenda as we build infrastructure for change
- ❑ There will be many opportunities to learn new skills and discover new directions of thought - this is what we value most about our work!

A flavour of our outputs and their impacts:

- [Mapping climate extremes and work](#)
- [Modeling carbon tax and basic income schemes](#)
- [Covid jobs x exposure analysis](#)

- [Unprecedented income calculations and maximum wage proposals](#)
 - [Green jobs, skills and industries tool](#)
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Person Specification

Essential

Experience

- Experience working with tech in a research, policy or any project-based environment
- Experience working efficiently, occasionally to tight deadlines
- Experience with data-wrangling large datasets

Education

- Degrees in computer science, physics, mathematics, economics, statistics, or related subjects
- Competence in Python, R or similar

Knowledge and Interests

- A commitment to economic and climate justice
 - An ability to independently plan and organise your workload, in line with agreed standards and deadlines, as well as adapt to new priorities
 - An ability to work collaboratively with others and keep relevant team members informed as to progress
 - An interest in politics, economics and the role of research in shaping agendas
 - An eye for detail.
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Desirable

Experience

- Previous publication of research articles, policy briefs, or similar
- Experience visualising a range of data sets

Education

- Postgraduate degree in computer science, physics, mathematics, economics, statistics, or related subjects
- Degree modules in advanced statistics, econometrics, or related subjects

- Degree modules in machine learning and/or natural language processing.
- Ability to use D3.js, or similar

Knowledge and Interests

- Knowledge of Autonomy's previous output
 - Familiarity with the UK think tank sector
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Bonus

- Interest in economic planning, agent-based modeling, sci-fi and/or [Cybersyn](#).
- A frustration with the status quo, in particular within STEM and the disconnect between advanced research and socio-economic realities.
- Experience experimenting with ML or NLP in a more advanced manner.
- Familiarity with front-end web programming, and web-scraping techniques.

What is Autonomy?

We are an independent think tank that produces innovative research and policy proposals related to the future of work, climate and welfare. Our audiences are governments, journalists, activists, trade unions and political parties. Our research grounds policy that can function in a world of automation and underemployment, as well as persistent economic inequality and environmental crisis. Our objective is to envisage and communicate a world of work that moves beyond precarity, overwork and mass poverty to one which prioritises democracy, free time, security and sustainability.

Autonomy has established itself as an innovative, nimble research organisation that has had significant impact within public debates around the future of work. Our work has garnered praise from the MPs from a variety of political parties, leading economists and wider social campaigns. Our research regularly appears in [mainstream media](#) of all kinds, from the tabloids to the [World Economic Forum](#).

We currently have a number of active streams of [research](#).

How to apply

Our application process is quite straightforward. Just send a CV (no more than 2 pages) and 1 page statement of interest to info@autonomy.work by the deadline.

Portfolio: although not essential, it will help us gauge your experience and skill areas if you send a document with hyperlinks to past projects or repositories where possible.

Application deadline: Feb 28th 2023

Interviews: Interviews will be held during March for an early April start (if not earlier)

If you have any questions about the role or are worried about applying please email info@autonomy.work

We are committed to providing equal opportunities for everyone regardless of their background. We acknowledge that people from certain backgrounds are under-represented in our sector and we're committed to doing what we can to correct this. We are particularly keen to receive applications from Black, Asian and minority ethnic people; people with disabilities; people who identify as being LGBTQIA; people who have a mental health condition; and people who identify as working class or have done so in the past.