



THE UNIVERSITY of EDINBURGH
Careers Service

Finding an MSc project with industry

(and applicable to finding a graduate job!)

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Inspiring futures



Today...

- Finding organisations
- Approaching organisations
- Following up
- Further support



Industry projects: a further benefit

- Rosie has outlined key benefits
- Now an extra one: **practice for graduate job hunt**

Because...

- The **same employers** who recruit graduates might be able to provide you with an interesting MSc!
- A chance to...
 - learn who they are / research them
 - practice applying

=> Improve your employment chances on graduation



Deciding who to target

- Do you have areas of interest from your studies?
- Have you worked in an industry previously?
- Are you interested in particular sectors?

Areas of focus in Scotland: low carbon (heat & transport); software; space; global business services; video games; digital health; life sciences...

www.talentscotland.com

Also **finance**^{*}, public sector, NHS, manufacturing, marketing Geographical constraints??? Online!

- Who is interested in UoE graduates? [MyCareerHub](#)



Finding organisations



Project (job) hunting approaches

1. Reactive

- See an advertisement
- Apply.

Need: to get a list

- ✓ You know there is an opportunity...
- ✗ ...but so do all the others who saw it!

2. Proactive

- Nothing is advertised
- Phone and ask
- or apply speculatively

Need to create your own list

- ✓ You might be the only applicant;
- ✓ they were about to hire.
- ✗ They may not have anything. Really.

Reactive hunting: 'get a list'

[MyCareerHub](#)

[eFinancial Careers](#)

[TARGETjobs](#)

[Prospects](#)

[Inside Careers](#)

[Gradcracker](#)

[STEM Graduates](#)

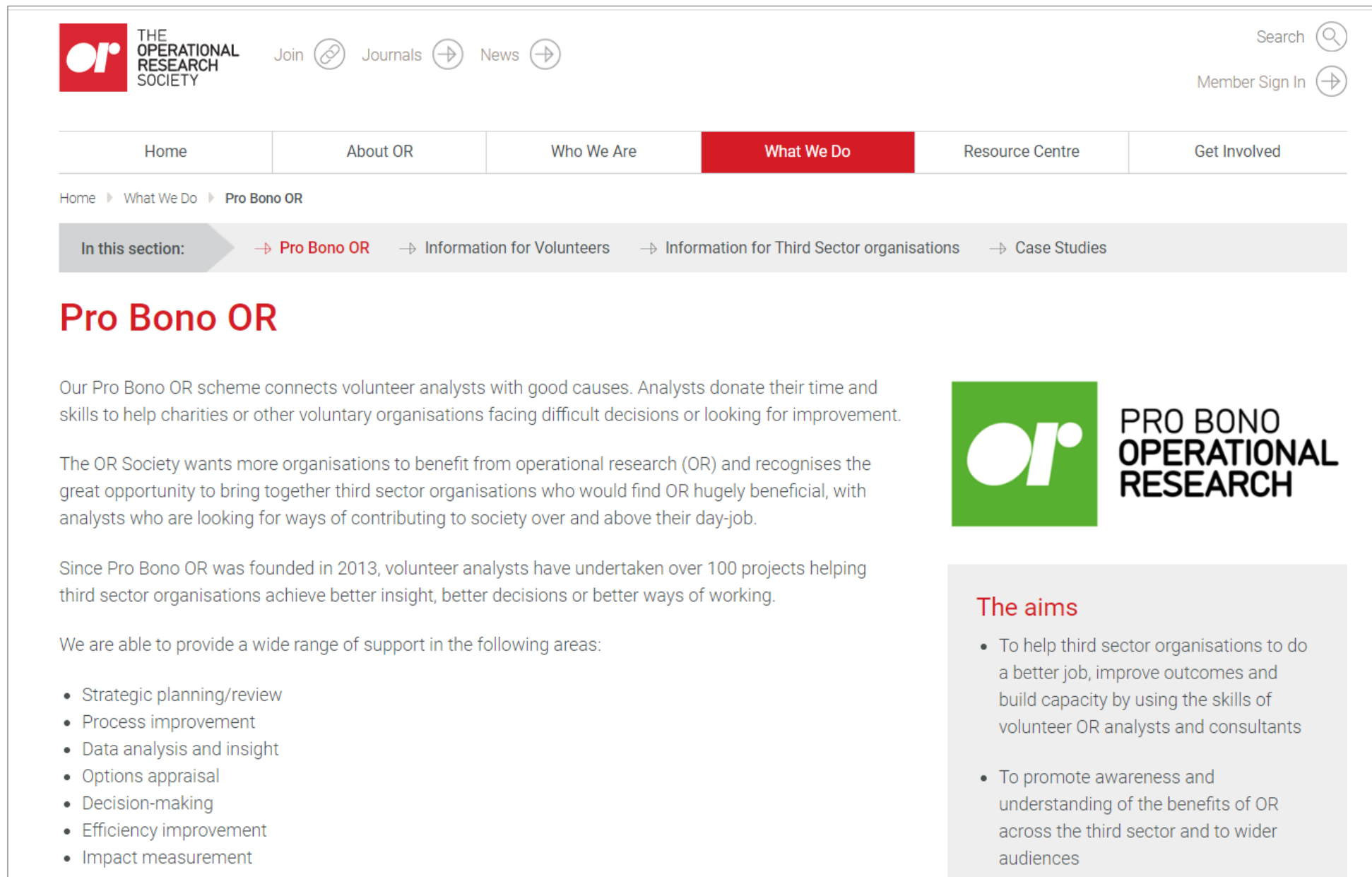
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These job sites list graduate recruiters... who *might* be able to use you to do a project for your MSc?



OR Society 'pro-bono' projects?



The screenshot shows the website for The Operational Research Society. The top navigation bar includes the logo, 'Join', 'Journals', and 'News'. A search bar and 'Member Sign In' are on the right. The main navigation menu has 'Home', 'About OR', 'Who We Are', 'What We Do' (highlighted), 'Resource Centre', and 'Get Involved'. The breadcrumb trail is 'Home > What We Do > Pro Bono OR'. A secondary navigation bar lists 'In this section: Pro Bono OR', 'Information for Volunteers', 'Information for Third Sector organisations', and 'Case Studies'. The main heading is 'Pro Bono OR'. The text describes the scheme connecting volunteer analysts with good causes. It states the OR Society wants more organisations to benefit from OR and recognises the opportunity to bring together third sector organisations who would find OR hugely beneficial, with analysts who are looking for ways of contributing to society over and above their day-job. It mentions that since Pro Bono OR was founded in 2013, volunteer analysts have undertaken over 100 projects helping third sector organisations achieve better insight, better decisions or better ways of working. It lists the areas of support: Strategic planning/review, Process improvement, Data analysis and insight, Options appraisal, Decision-making, Efficiency improvement, and Impact measurement. A box titled 'The aims' lists: To help third sector organisations to do a better job, improve outcomes and build capacity by using the skills of volunteer OR analysts and consultants; and To promote awareness and understanding of the benefits of OR across the third sector and to wider audiences.

THE OPERATIONAL RESEARCH SOCIETY

Join Journals News

Search Member Sign In

Home About OR Who We Are **What We Do** Resource Centre Get Involved

Home > What We Do > Pro Bono OR

In this section: → **Pro Bono OR** → Information for Volunteers → Information for Third Sector organisations → Case Studies

Pro Bono OR

Our Pro Bono OR scheme connects volunteer analysts with good causes. Analysts donate their time and skills to help charities or other voluntary organisations facing difficult decisions or looking for improvement.

The OR Society wants more organisations to benefit from operational research (OR) and recognises the great opportunity to bring together third sector organisations who would find OR hugely beneficial, with analysts who are looking for ways of contributing to society over and above their day-job.

Since Pro Bono OR was founded in 2013, volunteer analysts have undertaken over 100 projects helping third sector organisations achieve better insight, better decisions or better ways of working.

We are able to provide a wide range of support in the following areas:

- Strategic planning/review
- Process improvement
- Data analysis and insight
- Options appraisal
- Decision-making
- Efficiency improvement
- Impact measurement

PRO BONO OPERATIONAL RESEARCH

The aims

- To help third sector organisations to do a better job, improve outcomes and build capacity by using the skills of volunteer OR analysts and consultants
- To promote awareness and understanding of the benefits of OR across the third sector and to wider audiences

www.theorsociety.com/what-we-do/pro-bono-or/

Volunteer statistical projects?

The screenshot shows a web browser displaying the Royal Statistical Society (RSS) website. The URL in the address bar is rss.org.uk/RSS/Get_involved/Statisticians_for_Society/RSS/Get_involved/Statisticians_for_Society.aspx?hkey=c7977c58-1558-495a-9e5a-e99d64ea9cfd. The page features the RSS logo with the tagline 'DATA | EVIDENCE | DECISIONS' and a 'Sign In' button. A navigation menu includes 'Membership', 'Professional Development', 'Events', 'Get Involved', 'Influencing Change', 'Publications', 'Training', and 'About'. The 'Get Involved' section is expanded, showing a sidebar with options like 'Sections', 'Special Interest Groups', 'Local groups', and 'Statisticians for Society'. The main content area is titled 'Statisticians for Society' and includes a 'COMMUNITY FUND' logo. The text describes the RSS's commitment to public good and the role of volunteer statisticians in supporting third sector organizations.

<https://rss.org.uk/membership/volunteering-and-promoting/statisticians-for-society-initiative/>

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Volunteer OR Projects?

The screenshot shows a web browser window displaying the page <https://www.theorsociety.com/get-involved/pro-bono-or/information-for-volunteers/>. The page features the OR Society logo, navigation menus, and a main heading 'Information for Volunteers'. The content includes a description of Pro Bono OR volunteering, a section on 'The role of the volunteer', a list of four main stages, and 'Requirements to become a volunteer'. A video player is embedded on the right side of the page, showing a man speaking with the text 'ANALYSTS: VOLUNTEER YOUR SKILLS FOR GOOD CAUSES WITH PRO BONO O.R.' and a 'Watch on YouTube' button. Below the video is a red button labeled 'RESOURCES FOR PRO BONO VOLUNTEERS'. The browser's taskbar at the bottom shows various application icons and the system clock indicating 11:35 on 08/02/2022.

theorsociety.com/get-involved/pro-bono-or/information-for-volunteers/

THE OPERATIONAL RESEARCH SOCIETY

Join Journals News

Search Member Sign In

Home Membership Events Publications Training Research **Get Involved** About OR About Us

Home > Get Involved > Pro Bono OR > Information for Volunteers

In this section: → Information for Volunteers

Information for Volunteers

Pro Bono OR volunteers get a chance to use their skills to make a real difference to causes they care about, and to practice their skills in a wider arena. The scheme allows you to improve your knowledge of the third sector whilst cultivating your own skills.

The role of the volunteer

The role of the volunteer is to help charitable organisations benefit from OR in tackling their challenges or improving their outcomes. You can work as an individual or as part of a team to complete a project. Each project is drafted by the Pro Bono steering group committee, after which you must work with the organisation to specify the aims, activities, outcomes and success measures.

There are four main stages to being a Pro Bono OR Volunteer:

- Work with potential users to specify projects
- Undertake projects, either individually or in teams
- Write up and/or present work, wherever appropriate
- Mentor junior volunteers who need help (optional)

Requirements to become a volunteer

You must be at least one of the following:

- Member of The OR Society
- Studying in HE and with tutor endorsement for the project
- Minimum 1st degree in OR-related subject

ANALYSTS: VOLUNTEER YOUR SKILLS FOR GOOD CAUSES WITH PRO BONO O.R.

Watch on YouTube

RESOURCES FOR PRO BONO VOLUNTEERS →

11:35 08/02/2022

<https://www.theorsociety.com/get-involved/pro-bono-or/information-for-volunteers/>

Proactive job hunting: 'make a list!'

- Where have past graduates gone to work?
- Use MyCareerHub creatively!
- Use LinkedIn creatively





Search Opportunities

Saved Opportunities

Keywords

Data modelling

Opportunity Type

- Any
- Graduate - immediate start
- Graduate - future start
- Internship/ placement

Location

e.g. Edinburgh, Scotland, United Kingdom

- Any
- United Kingdom
- International

Contract Type

- Temporary
- Permanent

Contract Hours

- Casual
- Full-time
- Part-time

Employer Industry

- Any
- Accountancy, banking and finance
- Animals, plants and agriculture
- Armed forces and emergency services
- Business, consulting and management

Occupation

- Engineering and manufacturing
- Environment and agriculture
- Healthcare
- Hospitality and events management
- Information, research and analysis

- Only include opportunities from saved organisations
- Include expired opportunities

⬆ Fewer Search Options

Search

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Found 988 opportunities with the words Data modelling

Relevance ▾

Search Employers

Graduate Data Consultant (Data Engineering) (expired)

📍 Edinburgh

Quick Search



Think about your existing network



The wider network...



Based on 6 degrees of separation!

- Alumni?
- People search: who do/have they work(ed) for?
- Join groups (e.g. data, OR, statistics, quantitative finance, risk...)
- Jobs advertised

Check out advice from the Careers Service.



The screenshot shows a web browser window displaying the University of Edinburgh's Careers Service page. The URL in the address bar is <https://www.ed.ac.uk/careers/students/postgraduates/pgts/become-professional/develop-your-network-and-build-your-profile>. The page features the University of Edinburgh logo and a search bar. A large banner image shows four students in conversation. Below the banner, a purple bar contains the text "CAREERS SERVICE". The main content area includes a breadcrumb trail: Home > Careers > Students > Postgraduates > Taught postgraduates > Become professional > Develop your network and build your profile. A "Contact us" button is visible. The main heading is "Develop your network and build your profile", followed by a sub-heading "An introduction to networking, building your profile and tips on how you can develop." The text explains that building on an existing network is the next step. A section titled "Why is networking important?" lists three bullet points: networking is about showing interest, networking should be reciprocal, and talking to people is part of building a profile. A sidebar on the left contains navigation links for "Students", "Postgraduates", and "Taught postgraduates", and a "Become professional" section with sub-links for "Communicate appropriately", "Develop your network and build your profile", "Be resilient", and "Handle pressure". A "Change cookie settings" button is located at the bottom left of the page. The Windows taskbar is visible at the bottom of the browser window.

<https://www.ed.ac.uk/careers/students/postgraduates/pgts/become-professional/develop-your-network-and-build-your-profile>

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Careers in Tech & Data fair



THE UNIVERSITY of EDINBURGH
Careers Service

TECH & DATA CAREERS DAY

Wednesday 10th February 2021

Featuring Tech & Data Careers Panel, 12pm - 4pm

Opportunities for all – no matter what you study. Discover what's out there and challenge your preconceptions. There's more to careers in tech & data than you think.

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Sponsored by:
freeagent

Wednesday 9th March 2022

<https://www.hub.ed.ac.uk/students/events/>



Approaching organisations



Benefits to the host organisation?

i.e. how to sell it to them!

- Employ the expertise of a postgraduate student (with supervision) from the University of Edinburgh – at no cost!
- May offer a solution to a problem they've been unable to address due to lack of time / resource.
- Possibly use as a low-risk recruitment method
- Build links with the University
- Anything else?



Why might they be reluctant?

- Unsure of what you can offer (what OR actually is!)
- Time commitment?
- “Babysitting”?
- Expectation of a job they cannot provide at the end?
- Anything else?

What can you say to address these concerns?





Home > About OR

In this section: → About OR → History of OR → OR in Business → OR Methods → OR Careers

What is Operational Research?

Operational research (OR) is a scientific approach to the solution of problems in the management of complex systems that enables decision makers to make better decisions.

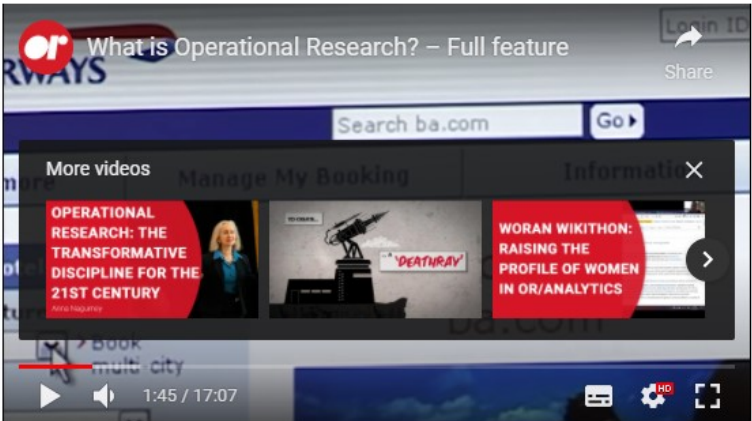
Who uses operational research?

OR is used by organisations of all sizes, including businesses across all industry sectors, government and other public sector bodies, charities, communities and even individuals. OR helps inform strategic, tactical and operational decisions as well as assisting in the design of public policy.

Most of the problems OR tackles are messy and complex, often involving considerable uncertainty. OR uses advanced analytics, modelling, problem structuring, simulation, optimisation and data science to determine the best solution to the problem and the best practical course of action.

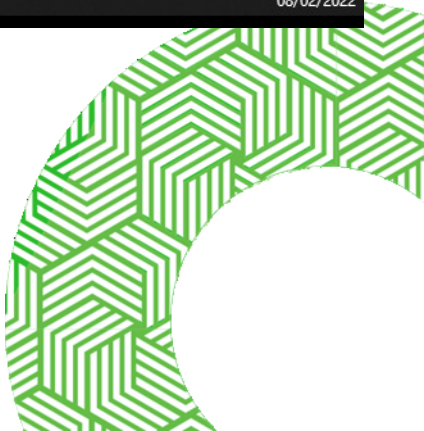
What are the benefits of using OR?

Depending upon the problem, the benefits of OR can be a wide range of performance improvements including cost reduction, revenue enhancement



OR case studies

If you would like to know more about the range of applications of OR and the types of benefits that it delivers, our resource centre contains many



Making the Approach

- Get a named contact
 - Telephone to ask
 - Use LinkedIn
 - Company website (if small)
- Email or post your letter?
- Get in touch soon after to see if received
- Follow-up after a few weeks to get feedback
- **Always** ask for another contact / lead



Your letter (email)

- **Why you're writing:** who you are, what you're offering them
- **Why this sector + how you can benefit them:** your motivation and knowledge
- **Why them** (company/organisation) in particular
- **Why you:** Your relevant experience, to date
- How to take things forward
- (if sending electronically insert links to relevant information)



If they ask for a CV?

The screenshot shows a web browser window displaying the website for the School of Mathematics Teaching at the University of Edinburgh. The URL in the address bar is teaching.maths.ed.ac.uk/main/undergraduate/employability/events-20-21/past-events. The page features the university's logo and a search bar. A large banner image shows a lecturer in a blue shirt addressing a large audience in a lecture hall. Below the banner, the text "SCHOOL OF MATHEMATICS TEACHING" is displayed. The main content area is titled "Past Events From Semester 1" and lists "Employability Tuesday Events 2020". The events are listed as follows:

- Week 1: After your Degree: Think Ahead!
- Week 2: GORS
- Week 2: Selling yourself, Talking to Employers & Networking
- Week 2: Careers Showcase
- Week 4: Writing Effective CVs & Covering Letters
- Week 5: Thinking about a PhD

The left sidebar contains navigation links for "School of Mathematics Teaching home", "Undergraduate", "Employability", and "Events 20/21", with "Semester 1" selected. A "Contact us" button is visible in the top right corner of the main content area. The Windows taskbar at the bottom shows the time as 14:57 on 09/02/2021.

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[https://teaching.maths.ed.ac.uk/main/employability/
events-21-22/past-events](https://teaching.maths.ed.ac.uk/main/employability/events-21-22/past-events)

