

# PlaceME@SMI 2020: Exploring the potential of police data

Project Leader / Supervisor	Jamie Smith
Department / Organisation	South Yorkshire Police
Project title	Exploring the potential of police data
Project reference	PMS-01-2020 & PMS-02-2020
Location of placement	South Yorkshire Police HQ, Carbrook Hall Road, Sheffield, S9 2EH

### Summary of research project (max. 250 words)

South Yorkshire Police (SYP) holds significant amounts of data about crimes and incidents across a wide range of systems. We believe there is potential to exploit this data to provide insights into how can further improve its services to the public. SYP employs analysts within a Data Intelligence Team that supports several parts of the organisation, but we don't necessarily have the capacity to fully exploit the data we hold.

We would like to offer the opportunity for someone to work with us to help explore how we can make better use of our data, with a particular focus on understanding demands on the organisation. We are interested in understanding new ways of looking at our data and what we might do in response to any new insight that these new techniques might reveal.

Previously we have had a mix of first and second year students who have completed the placement with us. This year we are seeking one first year student and one second year student as part of our development of career placement links with the SMI. Both placements will conduct data analysis appropriate to the skills they have in their current stage of their respective studies.

There are a number of publicly accessible websites which hold police data and will give interested parties an idea of the information we have in mind:

https://data.police.uk/

https://www.gov.uk/government/collections/policing-statistics

https://www.justiceinspectorates.gov.uk/hmicfrs/data/

## Links to external organisation(s), including international partners (if relevant)

The project will mainly focus on SYP data, but there may be opportunities to explore other partner agencies' data, where available, such as that held by South Yorkshire Fire and Rescue Service, NHS and local councils.







### Tasks to be performed during the placement

- Query databases to extract raw data
- Manipulate and organise the data
- Analyse the data, aiming to identify trends and exceptions
- Produce descriptive statistics
- Where appropriate and feasible, produce inferential statistics
- Combine dataset to provide insight not apparent in individual dataset
- Make recommendations for further analysis where appropriate
- Advise on new techniques that SYP could use
- Enumerate tasks in bullet points, which student will perform during the placement
- Many of our existing reports are based on Excel, with various databases storing the record-level data
- Oracle BI provides some capacity for analysis, but we are in the process of developing our use of the software to reduce our reliance on Excel.

### **Project's outputs**

We would expect that students will produce short briefings, reports and presentations to describe their findings. The format of these outputs will need to be tailored to the audience, for example, fellow analysts, or senior leaders.

# **Person specification**

Essential skills to perform the job

- Good understanding of quantitative analysis techniques
- Ability to derive insight from multiple datasets
- Experience of handling large datasets
- Report writing
- Ability to explain complex issues to non-technical audiences
- Advanced Excel skills

Desirable skills to perform the job

- Experience of using R (or similar software)
- Experience of data visualisation techniques







#### Terms and conditions

The placement will take place in South Yorkshire Police Headquarters, Carbrook House, Sheffield, S92EH, for 35 hours a week over a period of 6 weeks between mid-June and mid-September 2020. The successful candidate will be awarded a £1,953 bursary by SMI.

Students who will be awarded the placement are expected to write two blog posts (x 300 words) for SMI about their experiences.

**Important:** Placement students will need to be fully vetted by according to SYP policy. This will involve checking police systems against information provided by the student about their immediate family members and address history. Checks can take up to 10 weeks to complete. Students should be prepared to comply with these checks and understand that the process may delay the start of the placement if the necessary information is not provided promptly.

### How to apply?

Candidates should send a CV and a motivation letter in <u>PDF formats</u> by **23<sup>rd</sup> March 2020**, noon / 12pm, to Aneta Piekut <u>a.piekut@sheffield.ac.uk</u> in an email entitled 'PlaceME@SMI – South Yorkshire Police placement'.

Candidates will be interviewed by representatives from South Yorkshire Police week commencing 30<sup>th</sup> March at Police HQ.

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